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ABSTRACT

This teacher resource focuses on athletic (track and field) skills. It includes various skills and activities that are designed to promote learning opportunities and motivate Alberta (Canada) students to run, jump, and throw. It emphasizes the physical skills that form the basis of the track and field events in the 8th IAAF World Championships in Athletics. This international event will bring together 3,000 athletes and coaches from more than 200 countries as they come to Alberta in August 2001. The resource is intended to support implementation of the new K-12 physical education program of study and to support students' skill development related to running, jumping, and throwing as they correspond to athletic events. (SM)

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# Run, Jump, Throw

## ...and away we go!

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Kindergarten - Grade 12

**TEACHER RESOURCE**

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# Run, Jump, Throw ...and away we go!

Kindergarten to Grade 12
Teacher Resource

2001

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## Message from the CASS 2001 World Championships in Athletics Education Committee

It is our privilege to introduce "Run, Jump, Throw...and away we go!", a Kindergarten to Grade 12 teacher resource that focuses on athletic (track and field) skills. We believe the skills and activities in the resource will spark learning opportunities and motivate Alberta students to run, jump and throw.

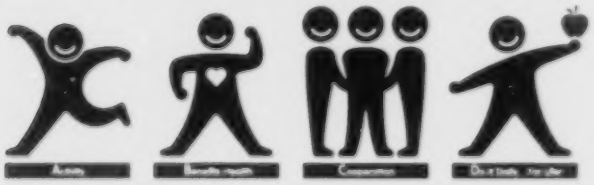
The resource, written by a team of Alberta teachers and Athletic Specialist, Dr. Linda Blade, will focus on the physical skills that form the basis of the track and field events of the 8th IAAF World Championships in Athletics. This international event will bring the world together as 3000 athletes and coaches from more than 200 countries come to Alberta in August 2001. The world will be watching as the event is broadcast globally.

The resource has been developed to support implementation of the new K–12 Physical Education program of study and is intended to support the skill development related to running, jumping and throwing as they correspond to athletic events. Students can achieve General Outcome "A" Activity, and curriculum organizers "Basic Skills" and "Application of Basic Skills in Individual Activities" if provided the opportunity, teaching and time to participate and practice in the activities in this resource. Other outcomes will be addressed dependent on your program plan and context.

From the outset, the focus of the 8th IAAF World Championships in Athletics, has been to create lasting legacies.

This resource was made possible as a result of a focus on legacies and the partnerships between Edmonton 2001 World Championships in Athletics Organizing Committee, the College of Alberta School Superintendents, EPCOR, Esso and Alberta Learning. The intent of the resource is for teachers to receive information that enables them to facilitate learning opportunities for Alberta students so they can lead an active healthy lifestyle through running, jumping and throwing activities.

**ABCD's of Physical Education**



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Run, Jump Throw...and away we go! Kindergarten to Grade 12 Teacher Resource, is a collaborative project of the Edmonton 2001 World Championships in Athletics organizing committee, the College of Alberta School Superintendents, EPCOR, Imperial Oil Esso and Alberta Learning. This group gratefully acknowledges the team that developed this resource.

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*Safety Guidelines for Physical Activity in Alberta Schools.* Alberta Centre for Injury Control, 2000. Available for purchase from the Learning Resources Centre, 12360 – 142 Street, Edmonton, Alberta, T5L 4X9. Order #405672. Phone: (780) 427–2767.

*Run, Jump, Throw Instructors Manual.* Athletics Canada, 1995.

*"Run! Jump! Throw!": The Official IAAF Guide to Teaching Athletics.* Muller, Harald and Wolfgang Ritzdorf. IAAF Coaches' Education and Certification System (CECS), 2000.

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# RUN, JUMP, THROW... and away we go!

## INTRODUCTION

The Run, Jump, Throw...and away we go! resource gives a structure for the teaching of athletics. Learning activities are provided for the practical instruction of four running events, including a section on longer runs, three jumping events and three throwing events.

Warm up activities, safety procedures and class management strategies are provided separately at the outset and are intended to be integrated with the skill component dependent on your context, student needs and interests.

The section on learning activities is organized as follows:

- A one-page overview for each of Run, Jump, and Throw skills.
- Teaching progressions, Levels 1–4 within each of the Run, Jump and Throw skill areas.

As indicated in the RUN, JUMP and THROW outlines, activities are progressive and cumulative. Generally, a four-level skill progression is offered for each event, beginning at Level 1 with fundamental movement patterns and culminating at Level 4 with advanced execution of the specific skill/event. The term "level" was chosen specifically to replace "division," since a given stage of the skill progression can be applied to any group of students irrespective of their age. The teacher must determine the level that best represents the students' current ability.

While the activities described form the framework of an athletics program, we anticipate that teachers will enhance learning opportunities for their students by applying their own expertise and creativity, and adapting activities to meet the needs of their own students.

## WARM UPS AND COOL DOWNS

### WARM-UPS

The purpose of the warm up is to heat the muscles and joints and to mentally prepare students for physical activity. No matter which game is selected, it is recommended that students start moderately and gradually increase the intensity of movement. A general body warm up should occur before a stretch.

The purpose of stretching is to prepare the muscles and tendons for stress and to increase range of movement in all joints that will be used in the lesson. It is useful to select a few stretches that target as wide a variety of joints and muscle groups as possible.


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It is generally accepted that proper stretching involves a smooth, controlled increase in the joint range to the level of moderate discomfort of the stretched muscle group, at which point the position is maintained (no holding of breath, excessive struggling or 'bouncing') for a minimum of six to 10 seconds.

## Warm-up Activities/ Games

- Scramble—Print numbers on as many tennis or utility balls as there are students and assign a number to each player. Scatter the balls and on a signal, the students try to find their ball. If the wrong one is picked up, they can throw it anywhere in the gymnasium, watching to avoid classmates. The game could also be played with teams finding balls one to 15 and 16 to 30.
- Scurry—Scatter bean bags around the inside of a running track (gymnasium) with the same number of bean bags as students. The students begin running around the gymnasium. As they run, the teacher tells them how to touch a bag; e.g., with the right foot, left foot, knee, index finger, forehead, shoulder, nose, left ear or chin. Only one student on a bean bag at a time.
- Aerobic Immunity Tag—A pursued student may not be tagged while doing ten repetitions of push-ups, sit-ups, jumping jacks or whatever exercise you wish. If three exercises are declared immunity exercises, the pursued player may do each of these, but only once, to remain immune.
- Merry-Go-Round—Players position themselves around a track. The teacher blows a whistle and tells the students how they must move around the track; e.g., skip, gallop or hop. Everyone moves in the same direction. Select exercises to suit group requirements and balance strenuous and less strenuous activities. Ideas for "laps" follow.
  - Jog slowly for one minute.
  - Walk with high knees for 30 seconds.
  - Walk normally for 30 seconds.
  - Run fast for 15 seconds.
  - Walk slowly for 30 seconds.
  - Walk with hands on knees, right on right, left on left for 30 seconds.
  - Walk with hands holding lower shins for 30 seconds.
  - Walk backward for 30 seconds.
  - Walk backward with long strides for 30 seconds.
  - Run backward for 30 seconds.
  - Walk forward with giant strides for 30 seconds.
  - Touch the floor with one hand at each step for 30 seconds.
  - Crab walk for 30 seconds.
- Popcorn Tag—Designate a large circle as a boundary and ask the students to imagine they're little popcorn kernels in a huge popcorn machine. As the machine heats up, they'll start to *pop!* That means they'll be hopping and skipping within the circle. Once they all pop, someone will be caramel corn, sweet and sticky. Anyone tagged by caramel corn gets stuck and joins by holding hands. Continue until the last person is tagged by the caramel corn group.


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- Over and Under—Line up teams of six to 10 students, each with a basketball or medicine ball. On the signal, the first team members in line pass the ball over their heads. The next players pass it between their legs. The following students keep alternating these movements. When the ball reaches the end of the line, the last players return to the head of the line and begin the "over and under" action again. This pattern continues until the first person is back at the head of the line.
- Individual Tug Of War—Students pair up facing each other and grasping each other's wrists. The game is over when one succeeds in pulling the other five metres back from the starting point. One variation is for the players to stand back-to-back, reach between their legs and hold hands in a non-slip grip, and then begin to tug each other.
- Both Arms, One Leg—This is a challenging variation of crab and bear walks. Students keep one foot off the ground and move in the direction the teacher specifies.

## COOL-DOWNS

The cool-down works in the opposite way as the warm up. It is a gradual slowing down from intense activity.

Cool-downs are also a chance to bring the students together to review the lesson outcomes. All activity should be low-key and may simply consist of a slow jog to a walk with a few stretches of the major muscle groups that were worked in the lesson.

- Walks of Life—Set the stage by talking about different ways people and animals move. A cat walks slowly and with grace, a soldier walks with shoulders erect and arms straight, and a tightrope walker walks carefully, one foot in front of the other. Form two parallel lines that face each other and whisper a specific kind of walk in someone's ear. The chosen walker moves down the centre of the lines while the others try guessing the walker's identity. Have everyone try the walk. Whisper the next walk.
  - Someone walking into cold water at the beach.
  - Someone walking and holding gas-filled balloons.
  - Someone walking a big dog on a leash.
  - Someone with shoes that are too tight.
  - A detective following a suspect.
  - A cowboy who just got off a horse.
  - A wrestler strutting into the ring.
  - A penguin.
  - An explorer walking through the jungle.
  - A bride walking down the aisle.
  - A young child learning to walk.
  - Someone walking up a steep hill.
  - Someone walking through deep mud.
  - Someone walking for the first time on high heels.
  - Someone walking barefoot on a rocky road.
  - A robot.


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- The Primary level classes can act out the "Wiggle Worm Workout."

When wiggle worms feel lazy,
They yawn and wiggle slow.
When wiggle worms feel happy,
They wiggle fast and go!

When wiggle worms feel friendly,
They wiggle and wave, "Hi!"
When wiggle worms feel silly,
They wiggle just one eye.

When wiggle worms feel hungry,
They sit right down to eat.
When wiggle worms feel tired,
They lay right down and sleep.

## SAFETY AND CLASS MANAGEMENT

Safety is paramount for the students and teachers involved in athletics as in all physical activities. Adherence to the guidelines listed below will maximize the safety of the learning environment. Teachers should also implement safety guidelines as described in the *Safety Guidelines for Physical Activity in Alberta Schools* (2000).

Within safety limits, teachers are reminded to use class formations that maximize the activity of the group. Long, boring waits between turns may foster a breakdown in students' "danger awareness"—especially in the throwing events—and may lead to risky behaviour.

- Plan lessons for students' gradual progress and skill development. Stress importance of rules and regulations promoting safety in all activities; and emphasize a progressive manner of teaching which includes lead-up activities, modification of equipment or rules to accommodate ability/age/physical development and available equipment.
- Equipment for throwing events must be of appropriate size and weight for age and strength of student.
- When using any equipment, care must be taken to ensure it is safe for use and does not show signs of deterioration.
- Teachers should establish routines, rules of acceptable behaviour and student responsibility at the beginning of the year. Students should be made aware of all rules specific to an activity and teachers must ensure they are understood, and enforced.
- Equipment Maintenance
  - Equipment should be kept in good repair.
  - Test the safety of any improvised equipment before teaching.
- Equipment Storage—Keep equipment locked up when not in use.
- Equipment Transport
  - Make it clear to the students that implements should NEVER be thrown or played with while they are being carried to or from the throwing area.
- Proper warm-ups and cool-downs must be included in all sessions.
- Teachers should do a pre-activity check of the facilities and activity area. Check for hazards; e.g., uneven running surfaces.


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- Footwear/Clothing
  - Encourage the students to wear sweat pants in cool weather.
  - Encourage the students to wear running shoes that fit well and offer adequate foot support and traction and have moderate cushioning in the heels. Too much cushioning is also a safety hazard.
  - Ensure that shoelaces are tied.
- Heat—When the learning environment is unusually hot or humid, take care that students wear hats, sunscreen and light clothing and take activity breaks to avoid overheating. Ensure they are well hydrated with frequent drinks of water.

## SAFETY IN THE RUNNING EVENTS

- Starting Blocks—Make sure starting blocks are stabilized. This usually requires another person to stand on them to add weight while in use so that they do not dislodge or slip when the runner pushes off.
- Hurdle Orientation—Orient hurdles so that they topple easily when hit. Ensure students do not follow one another too closely when practicing over hurdles.
- Modify heights and distances to accommodate different levels.
- Distance of middle or long distance runs should be appropriate for students age, ability and previous activity level of participants.
- Please see *Safety Guidelines for Physical Activity in Alberta Schools* for more information on safety in the following events: Cross-country Running, Track Events – Sprints and Relays and Hurdles.

## SAFETY IN THE JUMPING EVENTS

- Approach and Take Off Areas
  - Clear of debris to avoid tripping or slipping.
  - Not wet or slick.
  - Take off point in High Jump selected strategically at the 'near' end of the bar to have jumper land in the middle of the high jump mat, not on the far edge.
- Sand Pits
  - Landing well dug over and cleared of rocks and debris.
  - Pit width minimum is 1.8 m and long enough to accommodate longest jumper. There should be a maximum of 0.50 m between take-off board and front edge of pit.
  - Sand frequently raked during practice and repeatedly dug over, if necessary, to keep landing soft. Pit should be filled with sand to a minimum depth of 30 cm.
  - Ensure the rake is well away from landing area, prongs down.
- Foam Landing Units
  - Foam mats should be thick and dense enough to prevent the students from "bottoming out" with their backs or buttocks compressing the mat upon landing and hitting the ground hard.
  - Minimum size of mat suggested as: 1 ½ m x 3 m x 30.5 cm or 5 ft x 10 ft x 12 in. Smaller utility mats should cover the base of the standards.
  - The mats should be fastened together securely to prevent students from falling between two units.

- High Jump Bar—Only circular cross-section bars should be used. Ropes or elastic crossbars are recommended for Levels 1–3 and early stages of Level 4. Ropes or elastic crossbars should be weighted, not tied to crossbars.
- Please see *Safety Guidelines for Physical Activity in Alberta Schools* for more information on safety in the following events: High Jump, Long Jump, Triple Jump.

## SAFETY IN THE THROWING EVENTS

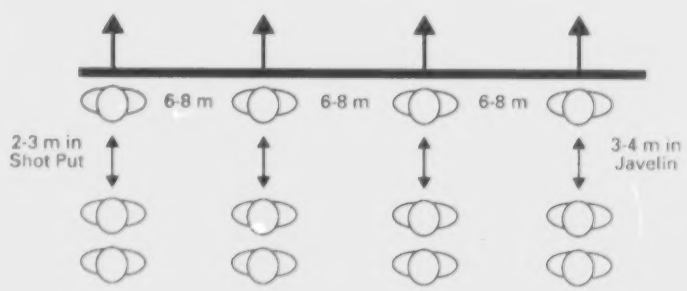
- All throwing should be done under the direct supervision of the teacher.
  - Teachers should supervise onsite and constantly have a visual of all students.
  - All students should stand well back from the throw line when they are waiting their turn.
  - "Look Before You Throw"—The thrower should make sure there is no one in the landing area or probable line of flight of the implement before the throw is made.
  - "All Throw, All Retrieve"—After throwing, the students should WAIT until all have thrown and a signal is given by the teacher to collect the implements.
  - Javelins must be carried vertically, with sharp end pointing to the ground.
  - Landing area should be well marked and void of people during the activity.
- Wet Conditions
  - As throwing implements can slide quite a distance after landing, it is important that teachers take extra precautions when the landing area is wet.
  - Teacher and students should be extra careful to position themselves out of any potential line of flight, since throwing implements can slip out of thrower's hand more easily under these conditions.
- Please see *Safety Guidelines for Physical Activity in Alberta Schools* for more information on safety in the following events: Discus, Javelin, Shot Put.

### Linear Throwing Events (Shot Put & Javelin)

**Class Organization**

- Left-handed students should be placed to the left and right-handed students to the right side of the group.
- Organization of a group of students for a throwing session can best be done according to the following schematic:

a. Throwing 'stations' along a straight line





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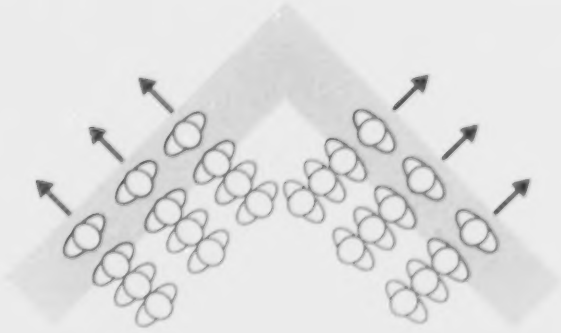
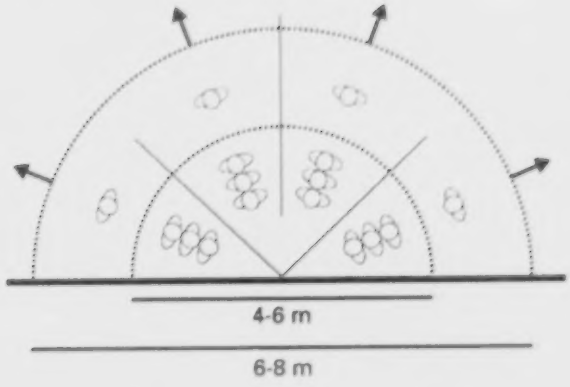
b. Throwing 'stations' along a "V-shaped" line



**Rotational Throwing Events (Discus)**





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# RUN

## Skill Progressions at a Glance

### General Criteria

- Body upright and centred (very slight forward lean)
- Head alignment centred; eyes focused straight ahead
- Shoulders relaxed, but square
- Strong arm swing
- Loose hand grip; thumb aligned with forearm
- Pawing action of the feet
- Full, fluid arm swing with forward movement toward (but not across) centre line

### Middle/Long Distance

- Relaxed, fluid arm swing
- Elbow angle held at 90 degrees
- Heel-to-toe roll of the foot
- Less extreme leg drive and lift

### Safety for Running Events

- Warm up: easy run/stretch
- Appropriate running surface
- Appropriate footwear/clothing
- Stabilize starting blocks
- Capacity for hurdle to topple when hit

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## Running Skills Criteria and Progressions at a Glance

| | **Sprints** | **Starts** | **Hurdles** | **Relays** |
|---|---|---|---|---|
| | • Knee lift to hip height<br>• Full arm swing with strong emphasis on back swing (elbows in and bent at 90°)<br>• Relaxed, quick leg cycle<br>• Full leg extension on drive<br>• Small recovery angle of leg (knee bent on swing through)<br>• "A's", "B's" and "C's" actions (described in Learning Activities) | • Quick reaction on "go"<br>• Opposite arm/leg combo on "go"<br>• Full leg extension off line<br>• Vigorous assistance from arms<br>• Head-to-toe alignment of body<br>• Small-to-full stride progression<br>• Low-to-tall body progression | • Running not jumping action<br>• Maintenance of rhythm<br>• Aggressive "1,2" leg action across hurdle<br>• Straight-line attack at barrier<br>• Efficient trail leg rotation (close to body)<br>• Counter-balance of arm and trail leg<br>• Strong drive by lead leg away from hurdle after ground contact<br>• Maintenance of "tall" and "proud" body posture throughout | • Maintenance of baton speed throughout<br>• Judgement of distance to partner<br>• Adjustment of running speed while passing the baton |
| **Level 1** | • High-knee marching ("A's")<br>• Forward skipping (low knee/high knee)<br>• Backward skipping and/or running<br>• Running on the spot (low knee/high knee)<br>• Running on the spot to sprint<br>• Running while kicking bum ("C's")<br>• Bum kicks to sprinting | • Running from prone position<br>• Running from supine (on your back) position<br>• Reaction to visual signal<br>• Reaction to auditory signal; e.g., clap, whistle, finger snap<br>• Introduction of "On your marks", "Set", "Go"<br>p. 17 | • Running over low objects maintaining consistent stride pattern<br>p.23 | • Movement of object from hand to hand while running<br>• Passing objects to others in any direction without dropping while running<br>p. 31 |
| **Level 2** | • All of Level 1 skills above but now focusing on arms in opposition to legs<br>• Controlled high frequency turn-over of legs<br>p. 11 | • Running from prone (various signals)<br>• Standing start (various signals) Focus on arms in opposition<br>• High frequency to regular sprinting; e.g., through ladder and sprint p. 18 | • Rhythmic running over low obstacles<br>• Forward lead leg challenge of barrier<br>• Learning of terminology ["lead leg"; "trail leg"]<br>• Try left and right legs on 'lead' and 'trail'<br>p. 24 | • "Visual" (4x400m or 4x200m) exchange at low running speed and at high running speed<br>• Relay games<br>p. 32 |
| **Level 3** | • Marching ("B's"), skipping ("B's")<br>• Bounding<br>• Bounding to sprinting<br>• Pursuit runs<br>• Sprints from flying start<br>p. 13 | • Introduction of crouch start (no blocks) [try right and left leads]<br>• Introduction to starting blocks<br>p. 19 | • Introduction of trail leg action with standing trail leg drill<br>• Stepping over while walking drill<br>• Stepping over while running ("1,2" of lead, trail) drill<br>• Trail arm in opposition | • "Non-visual" (4x100) exchange<br>• while standing<br>• while walking<br>• while jogging<br>• at full speed with partners<br>p. 34 |
| **Level 4** | • Refinement of Level 2 & 3 drills with proper arm and leg combos<br>• Resistance runs<br>• "Ins and outs"<br>• Sprints from starting blocks<br>p. 15 | **Middle/Long Distance**<br>• Moderate running (heel-to-toe)<br>• Measurement of pulse<br>• Introduction to "continuous" running<br>• Introduction to "interval" training p. 21 | • Rhythmic running over 3-5 hurdles<br>• Sprints from starting blocks over hurdles<br>p. 29 | • Refinement of "non-visual" exchange<br>• "Personal space" awareness<br>p. 36 |



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# SPRINT - LEVEL 1

## Learning Activities

**HIGH KNEE MARCHING (SOMETIMES REFERRED TO IN ATHLETICS AS "A'S")**

- In a line march 10 to 20 metres
- Keep upper body tall
- Opposite arm/leg action
- All action should be in straight line
- This should be applied to all the following activities.

**FORWARD SKIPPING**

- In a line skip with low knees 10 to 20 metres
- In a line skip with high knees ("A's") 10 to 20 metres (thighs parallel to ground).

**RUNNING ON THE SPOT**

- With low knees
- With high knees ("A's")
- Leading into a sprint
- Run on the spot approximately 10 seconds then accelerate into a sprint 10 to 20 metres.

**BUM KICKS (SOMETIMES REFERRED TO IN ATHLETICS AS "C'S")**

- Teacher controls forward speed of students during "bum-kicking" phase—we are looking for quick foot work, but slow forward progress at this time.
- Students move forward slowly 5 to 10 metres with quick bum kicks and then accelerate into sprint.

**RUNNING GAMES**

- **Individual**
  - Skip as fast as you can across the gymnasium—start with low knee skips and progress to high knee skips.
  - Skip across the gymnasium using as few skips as possible (skip for distance).
  - Sprint across the gymnasium as fast as possible.
- **Team**
  - With a partner at each end of the gymnasium, the first skips to the second, slaps hand and the second skips back.
- **Team**
  - As above but sprinting.
- **Team**
  - Repeat both above activities using teams of about six members (shuttle relays).

**Materials**

- none required.


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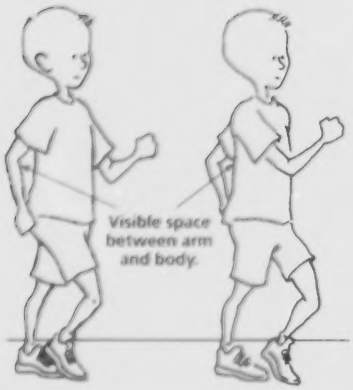
# SPRINT - LEVEL 2

## Learning Activities

Review all activities from Level 1 Sprints:
e.g., high knee marching.

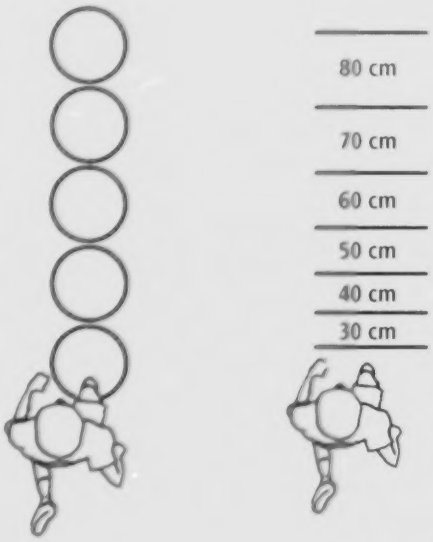
### ARM ACTION WORK

- Repeat all activities from Level 1 (up to races) now emphasizing arm action
  - march slowly forward 10 to 20 metres, swinging arms
  - right arm forward as left leg raised and vice versa
  - on forward swing, the arm reaches approximately shoulder height
  - angle at elbow is approximately 90 degrees
  - arms swung backward and forward at side of body—not across body
  - hands held in loose fist aligned with forearm
  - visible space between arm and body on back swing




### CONTROLLED HIGH FREQUENCY TURNOVER OF LEGS

- Run on the spot with high knees.
- Run on the spot with high knees—on a signal they "sprint" on the spot as quickly as possible maintaining good running form (no more than five seconds of sprinting). Think "tall" while sprinting.
- Run down a row of approximately 10 small hoops set out in a line (still emphasizing good form—stay tall).
  - run down line of hoops emphasizing good form and "fast feet."
  - Lines of ropes are set out, each successive rope a little farther apart than the previous one; e.g., first gap 30 cm, then 40 cm, then 50 cm up to 80 cm.
  - run down lines of ropes again emphasizing fast feet, good form and powerful arm swing.




### PEER ASSESSMENT

- Students work in pairs—the first student runs on the spot demonstrating the aspects of sprinting form learned.
- Partner assesses form from in front of partner and then from the side.
- Switch roles.
- As above but with the students sprinting 20 to 30 metres.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**RUNNING GAMES**

- Class forms four to five lines—the front runner in each line races the other front runners (distance will vary depending on indoor/outdoor location).
- Repeat the above a few times—if possible, time the students and have them try to improve their times.
- To conclude, all the students line up at one end of teaching area—sprint to the far end. The last two or three runners are eliminated and can begin the cool down. Remaining runners race back—again two or three eliminated—continue until only three or four remain. They race for the final time.
- Many tag games and relays could be included at this time.

**Materials**

- small hoops, skipping ropes, stop watches


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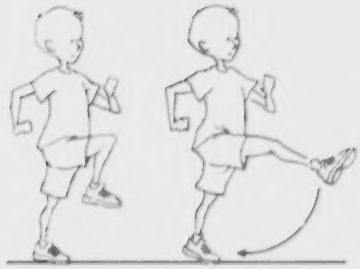
# SPRINT - LEVEL 3

## Learning Activities

**MARCHING (SOMETIMES REFERRED TO IN ATHLETICS AS "B'S")**

- Students line up about 10 abreast and practice marching 15 metres with high knee followed by lower leg extension and pawing action of the foot as the leg swoops down to weight-bearing position. Look for tall body posture; weight-bearing leg remaining fully extended; strong arm swing.

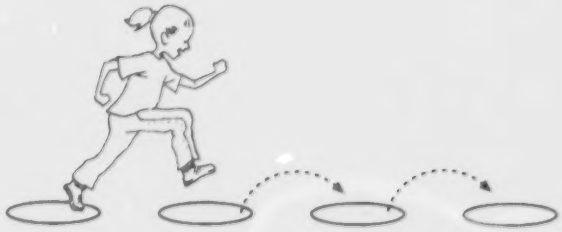


**SKIPPING "B's"**

- Same as above, but working the high-knee and pawing action in with a skipping rhythm.
  - Right leg only; e.g., Skip, right leg lift, skip, right leg lift, skip, right leg lift, skip, etc.
  - Left leg only; e.g., Skip, left leg lift, skip, left leg lift, skip, etc.
  - Both legs; e.g., right, left, right, left, right, left, right, etc.

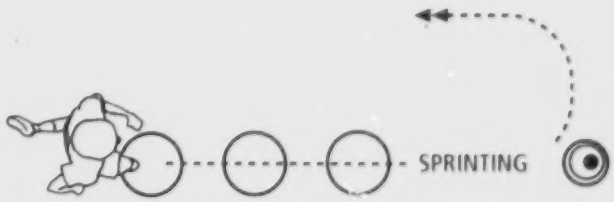
**BOUNDING**

- **Set up**: Place eight to 10 hoops on the ground in a line with equal distance between, forming three to five lines of hoops.
  - Students leap from center of one hoop to the next continuously, as if leaping from rock to rock across a river.
  - Hoops continue to be spread out farther away from each other to challenge children to extend driving leg (lines of hoops can be spread differently to accommodate varying capacities). Emphasize that upper body should remain tall, not leaning forward and arm swing should be strong.
  - Once students find a "challenging, but manageable" setting of the line of hoops, a faster pace through the hoops is attempted.



**BOUNDING TO SPRINTING**

- **Set up**: A cone is placed 15m beyond each line of hoops.
  - Students bound quickly through the hoops and immediately sprint to the cone.
  - Once the transition from bounding to sprinting is smooth a relay race can be run; e.g., bounding through the hoops, then sprinting around the cone and back, sending teammate off with a slap of the hand.





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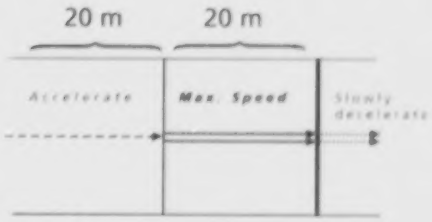
**PURSUIT RUNS**

- In pairs, students jog one behind the other, each grasping an end of a rope. When the front runner releases the rope, the partner also releases and tries to chase down the front runner.

**SPRINTS FROM A FLYING START**

- Using a 20-metre approach, students practice running through a 20-metre zone at maximum speed. Look for good running form as specified in running and sprinting criteria.




**Materials**

- hoops, cones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# SPRINT - LEVEL 4

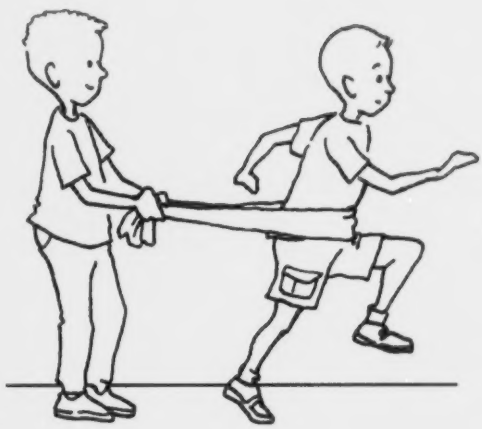
## Learning Activities

**ONE-SIDED "B's"**

- Same set up as the "B" drills in Level 3 Sprints, except the work is done over a 50-metre zone.
  - While jogging, have the students fit in the "B" action with the right leg; e.g., right leg, three strides, right leg.
  - Repeat the drill with the left leg. Aim for as little disruption from jogging rhythm as possible throughout the movement.
  - Gradually increase the speed of the run while doing one-sided "B's."
  - Transition from one-sided "B's" to sprinting. Students should increase the speed of the runs with "B's" until the speed is so great that they are forced to break into a regular sprinting motion. If the students find it difficult to fit the "B" action into the jog/run rhythms, suggest that they simply do a "high knee" action ("A's") rather than the full, lower leg sweep.

**HARNESS RUNNING "A's"**

- **Set up**: Students work in pairs; each pair has a rope or a towel; partners stand one behind the other. The rear runner puts the towel around the hips of the front runner and holds onto the ends of the towel to offer slight resistance.
  - Front runner attempts to "pull" the rear runner forward by driving forward with a high knee running action over a 25-metre distance; partners switch positions after a few repetitions. Look for the rear runner to offer only enough resistance to make the front runner work hard, but not so much that forward movement is stalled. Discuss "trust"!
  - Same action as above, but at 15 metres the towel is released, allowing the front runner to break into a full sprint for about 20 metres.

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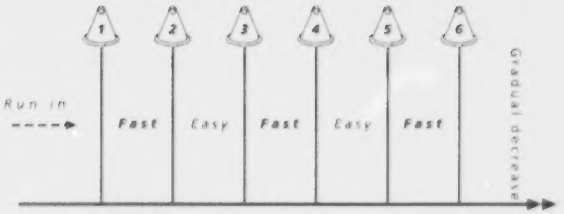
**"INS AND OUTS"**

- **Set up**: Place six cones at 10- to 15-metre intervals down the field or track.
  - With a 20-metre approach run, the students sprint hard from cones 1 to 2; ease off and coast from cones 2 to 3; sprint hard from cones 3 to 4; coast from 4 to 5; sprint from 5 to 6. Look for a change in the range of arm and leg drive between "hard sprinting" sections and "coasting" sections; leg and arm swing should become more vigorous on "hard" sections. Shoulders must stay relaxed throughout the sprint.

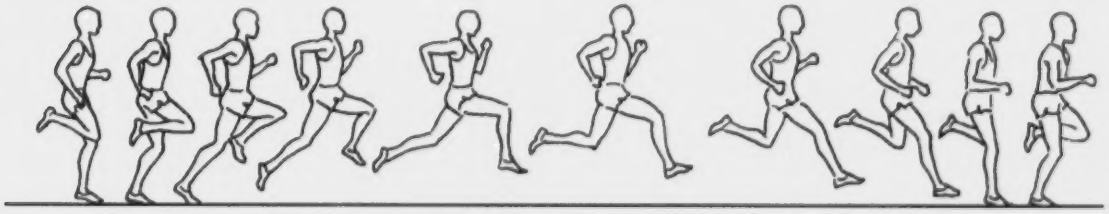



**SPRINTS FROM STARTING BLOCKS**

- **Set up**: Put starting blocks at start line in each lane on a track.
  - Students should practice: a. starting block set up, b. starting on command and c. accelerating from starting blocks to 30 metres. Follow guidelines for "How to Use Starting Blocks" in Level 3 Starts on page 19.
  - It is best for the students to first try starts individually. Once each student feels confident starting from the blocks, proceed to races from starting blocks.

**Materials**

- towel or rope; starting blocks, cones



Sprint—Full Sequence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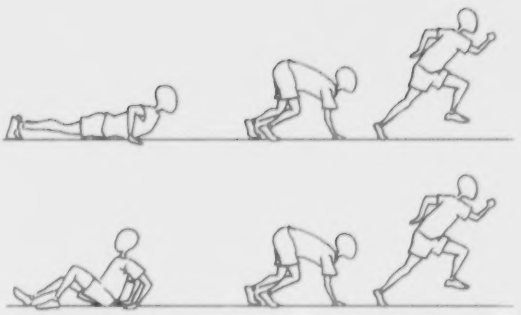
# START - LEVEL 1

## Learning Activities

### RUNS FROM A LOW POSITION

- Runs from prone position (lying on stomach).
- Runs from supine position (lying on back).
  - Facilitates the idea of starting from a low position.
  - Students start in prone/supine position and on command, run to a designated line or area; repeat and return.

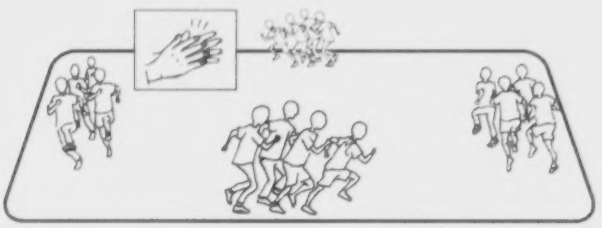


### REACTION TO VISUAL SIGNAL

- Students line up at one end of the area and sprint a short distance upon a visual signal from the teacher; e.g., hand dropping, flag wave.

### REACTION TO AUDITORY SIGNAL

- Students space themselves around the track or outside part of field or gymnasium.
- Students prepare to start running in one direction and listen for a starting cue; e.g., whistle, "go," clap, start gun.
- Students run for five steps and then stop on their own or on a teacher cue.



### INTRODUCE "ON YOUR MARKS. SET. GO!"

- Same activity as above, but the teacher uses the standard verbal starting sequence.
  - Look to add interest by challenging your students to "catch" the one ahead of them.
  - Remind the students that there is a two-second span between the three parts of the start command.

**Materials**

- whistle, start gun or clapper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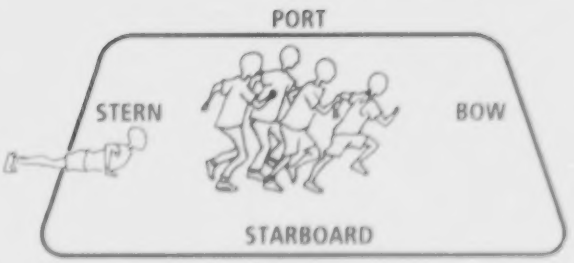
# START - LEVEL 2

## Learning Activities

### RUNS FROM PRONE

- Use a verbal command game like "Shipwreck" to facilitate the development and practice of this skill. The front of your area is the "bow" while the back is the "stern." Left is "port" while the right is "starboard." Add "submarine" (lie on back one leg up) and "tidal wave" (lie on stomach, hands on head). Teacher calls "stern" or "bow" and students run to the designated location of the gymnasium. "Submarine" or other commands can be performed at any point in the gymnasium.
- Use different auditory signals to represent the above directions or positions; e.g., one whistle for "bow," two whistles for" stern."

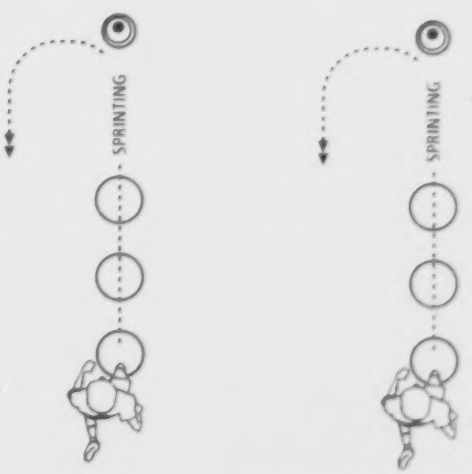



### STANDING START

- Use various (e.g., flag wave, whistle) signals and focus on arms in opposition.
- Divide students into flights of three to eight students, grouping runners of equal ability.
- Mark a finish line 15 to 40 metres away.
- Bring the first flight to the start line, and start each flight in succession.
- Use visual, auditory, then start command ("On Your Marks," "Set," "Go") signals to begin each round.
- Students to run six to 10 times.
  - Look to challenge the students by having a champion flight.

### HIGH FREQUENCY TO REGULAR SPRINTING

- Pair up the students and set out two "ladder" courses made up of a number of hula hoops, tires, rope or plastic sticks laid out in succession on the ground or elevated a few centimetres for slightly higher stepping, with rungs no more than 50 cm apart.
- After the ladder, set up a sprint stretch of 20 to 30 metres with a finish line.
- Students race through in pairs, stepping through the "ladder" portion and then sprinting for the finish.
  - Keep the ladder section narrow to encourage stepping in a straight line.




**Materials**

- whistle, starting gun or clapper, hoops (or plastic sticks), cones, rope

# START - LEVEL 3

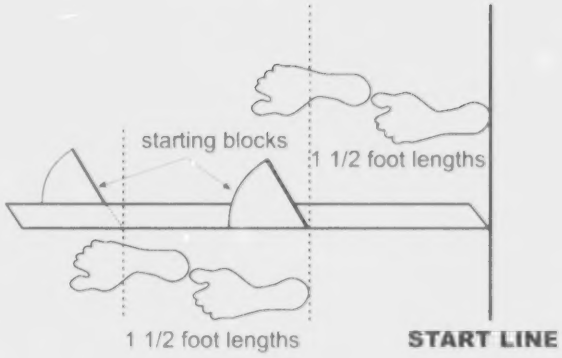
## Learning Activities

### INTRODUCTION TO CROUCH START

- Explain to the students that the crouch start has four phases: "ON YOUR MARKS" position; "SET" position; DRIVE and ACCELERATION.
  - "ON YOUR MARKS"—the sprinter is in the blocks, crouched behind the starting line.
  - "SET"—the sprinter lifts hips to optimal height.
  - DRIVE—on "go" (or gun) the sprinter leaves the blocks and takes the first stride.
  - ACCELERATION—the sprinter increases speed and makes the transition to upright running.

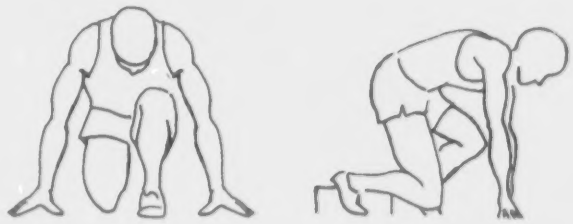
### MEASUREMENT FOR FOOT PLACEMENT

- **Set up**: Have the students pair up and work at designated spots along a start line. Give them chalk.
- **Activity**: One student measures 1½ foot lengths back from the start line and the partner indicates the spot with a chalk mark. From this first mark, another 1½ foot lengths is measured and marked.
- The student with the chalk helps the other student through the practicing of "On Your Marks" and "Set" positions below, then the runner becomes the marker and the measurement of foot placement is repeated with the second partner practicing starting positions.

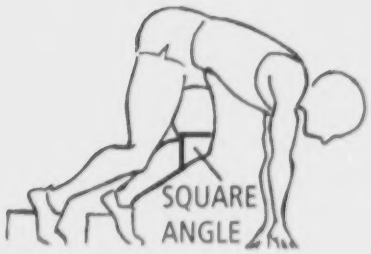



### PRACTICE "ON YOUR MARK" AND "SET" POSITIONS

- **Set up**: Students continue to work in pairs, one watching the other. The runner now stands facing the start line, one foot ahead of the other using the chalk marks as guidelines for placement of feet (toes at chalk marks). The other partner says, "on your marks" and the runner crouches down with knee of back leg providing support on the ground (knee of front leg is tucked up under chest) and hands placed slightly more than shoulder width apart just behind the starting line. Fingers are arched. Head is level with the back, eyes looking straight down, and shoulders positioned over hands.



- Once the runner is settled comfortably in the "ON YOUR MARKS" position, the assisting partner says, "set," and the runner raises the hips up (back knee comes off the ground) high enough so that front knee forms a right angle. Look for the hips to be slightly higher than the shoulders and the shoulders slightly ahead of hands.




**INTRODUCE STARTING BLOCKS**

- **Set up**: Introduce the students to the starting blocks by showing them how the blocks can be adjusted and tightened. Emphasize the importance of fixing the blocks firmly to the running surface so that they do not slip on the drive phase.
  - The runner adjusts the blocks on the track in such a way that the front of each block is lined up at the level of the runner's respective chalk marks.
  - When the assisting partner says, "on your marks," the runner places feet firmly against the starting blocks (toes making contact with ground) and assumes the appropriate position practiced above.
  - Once the runner is in correct position, the partner says "get set"—waits a couple of seconds for the runner's hips to rise to proper height, and "go." On "go" the runner drives hard against the starting blocks, matching leg effort with strong arm drive, and accelerates 10 metres, maintaining the forward lean of the body. Watch for full extension of front leg off the starting blocks.
  - Runner tries starts with the right leg in front; then the left leg in front.
  - The first runner then becomes the starter, and the other partner tries sprinting out of the blocks.

**Materials**

- chalk or tape; starting blocks

Start—Full Sequence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# MIDDLE/LONG DISTANCE RUNNING

## Learning Activities

**STANDING START**

- Front foot is placed up to the line with the other foot about shoulder-width back.
- Weight is over the front foot.
- Opposite arm forward, ready to work immediately with legs.
- Drive is off the front foot.
- Commands are only "On your marks, "Go!" – there is no "Set."

**CONTINUOUS STEADY RUNNING**

- Running relatively long distances at nearly constant speed without rest is used to develop general endurance and, in more experienced runners, as recovery. Heart rate is 120–140 beats per minute.
- To avoid the danger of boredom with distance running try to vary the activities—many excellent ideas for students are contained in the Athletics Canada's "Run, Jump, Throw" book.

**CONTINUOUS FAST RUNNING**

- Shorter distances than above but at higher speeds with no rest. Heart rate is 140–170 beats per minute.

**FARTLEK**

- "Speed play." This is informal training away from the track—generally on trails.
- A variety of fast and slow sections, often including hills.
- Runners decide when, how far and for how long each of the faster sections will be run.

**INTERVALS**

- Variety of faster intervals, interspersed with recovery jogs or rests. The type of interval variation chosen depends on the purpose: Shorter, faster intervals correspond to speed endurance; longer, slower intervals correspond to aerobic endurance.
  Variations can include:
  - number of repetitions
  - length and/or type of recovery
  - multiple or single sets; e.g., 8 x 400 m or 2 sets of 4 x 400 m
  - pace of run
  - distance of each repetition.


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**SPEED**

- Increasingly, competitive distance runners have to have a finishing kick.
- Speed training should not be neglected. Speed sessions are best performed following easy or rest days.

**GENERAL CONDITIONING**

- Work in the gymnasium, such as circuit training, light weight training and resistance training are all important for middle and long distance runners.

**TECHNIQUE**

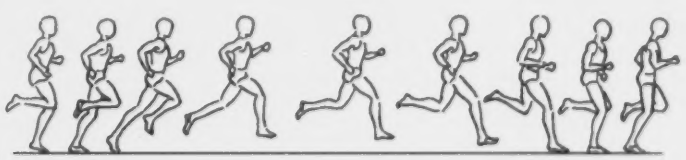
- Exercise such as high knees, ("A's") paw backs ("B's") and bum kicks ("C's"), as well as concentration on arm and leg action and upper body posture are important to all runners.
- Foot position at touchdown varies with the running pace.
- Outside of the foot usually strikes the ground first—outside of the heel in long races, middle of the foot in shorter (middle distance) races.
- Foot meets the ground in a paw back motion.
- Free leg swings forward and up, but the thigh is not raised as high as in sprinting.
- Extension of hip, leg and foot of the driving leg is complete in middle distance races—less so in long distance races.
- Arm movement less vigorous than in sprinting.
- Shoulders should be very relaxed.
- Posture is erect.

**SAFETY** (see also section on Safety and Class Management)

- Appropriate footwear is recommended.
- Be aware of conditions underfoot.
- Do not increase distance run by more than 10% per week.

**Materials**

- a watch for monitoring heart rate



Middle and Long Distance Running—Full Sequence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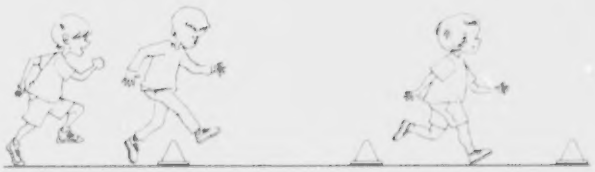
# Hurdles - Level 1

## Learning Activities

### RUNS OVER LOW OBSTACLES

- Set out four or five lines of five small pylons approximately two to three metres apart.
- Students run over "obstacles" (pylons)
  - upper body erect
  - eyes forward—don't look down at the obstacle
  - "run" over obstacles—don't jump over them.



### RHYTHMIC RUNNING OVER LOW OBSTACLES

- Lines of obstacles are now adjusted so that each line has different spacing between obstacles.
- Students try to run over each line of obstacles maintaining a steady rhythm so that the rhythm over the obstacles is the same as between them. Students and teacher listen for the rhythm of the footfall.
- Students decide which line best suits their stride pattern.

### RUNNING GAMES

- Designate a finish line about 10 metres past the end of the longest line of barriers.
- Students now race each other over the barriers and past the finish line.
- Races of various kinds, both individual and relay can be set up.

**Materials**

- small pylons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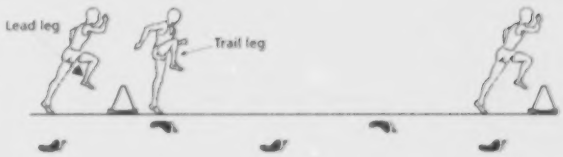
(2001)

# Hurdles - Level 2

## Learning Activities

### DETERMINE "LEAD" AND "TRAIL" LEG

- Repeat some or all activities from Level 1 Hurdles and re-emphasize that hurdling is fast, rhythmic running, not jumping.
- Using rows of pylons (or low "hurdles" – sticks over pylons not exceeding knee height) set at different spacings, the students work in pairs. Students watch their partners as they run over hurdles. Watchers are looking for regular, fast rhythm.
  - Repeat a few times.
  - Partners switch roles.
  - Repeat but this time the observer looks to see which leg is raised to get over the barrier. Repeat a number of times.
- Teacher now introduces the terms, "lead leg"—the leg that is raised first and "trail leg," the other leg.
- Try both left and right legs as lead legs.
- Students determine which leg feels the most comfortable or natural.
- Repeat a number of times with partner ensuring consistency of lead leg.




### FORWARD LEAD LEG CHALLENGE OF BARRIER

- Lines of barriers are now placed closer together.
- Students march with high knees (see Sprints Level 1) over the barriers, exaggerating high knee lift over the barriers and striking the ground on the far side of the barrier as quickly as possible.
- Paw-back action of the lead leg as it hits the ground (see Sprint Level 3).
- Knee brought up in a straight line, not thrown out to the side.
- Students skip with high knees, again raising the knee of the lead leg and vigorously bringing the lead leg back to the ground (lead leg is bent at the knee when being raised).
- Barriers are now spread apart again and the students run over them, again trying to "snap" the lead leg to the ground as quickly as possible (the goal is to spend as little time in the air as possible), and ensure the lead leg foot lands close to the barrier.

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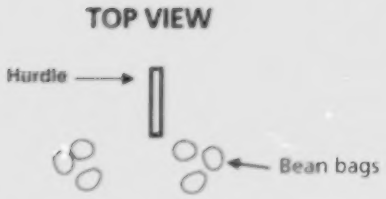
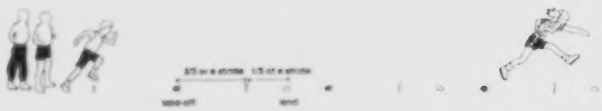
- Students run over the hurdles while a partner marks with a bean bag off to the side of running lane, the take off and landing points. Repeat twice. There should now be a cluster of three bean bags before the hurdle (take-off points) and three after the hurdle (landings).
  - Students estimate the distance from the take-off point to the barrier and the landing point to the barrier.
  - If the lead leg is being brought down quickly, the take-off point will be about twice as far from the barrier as the landing point.
  - After the partner repeats this exercise a bean bag can be placed at the take-off point and another at a landing point that is half the distance.
  - Students now run over the barriers and their partners watch to see if the lead leg is brought down quickly, close to the desired landing point.



**RACES**

- Students now find the line of hurdles that suits them best and race again, emphasizing a vigorous pawing down and back of the lead foot.
- Races of various kinds, both individual and relay can be set up.

**Materials**

- small pylons, beanbags, if possible other materials to make hurdles (pylons and doweling, blocks and doweling, laundry baskets)

# Hurdles - Level 3

## Learning Activities

### INTRODUCE TRAIL LEG ACTION

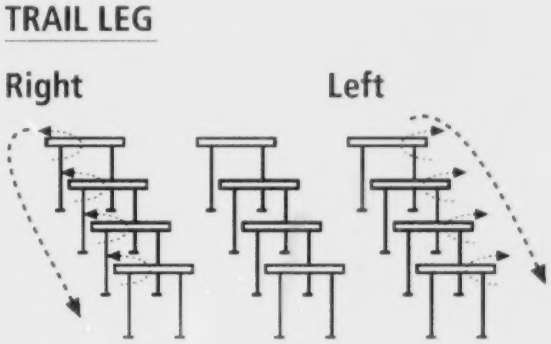
- Explain to the students that once the hurdle height exceeds knee height it becomes necessary to cycle the trail leg around to the side in order to avoid collision with the hurdle (and time lost). Emphasize "lead leg straight through," "trail leg around." The toe of the trail leg foot must also be held up sideways in order to avoid snagging the hurdle.

### STANDING TRAIL LEG DRILL

- **Set up**: Students work in pairs. One acts as a 'pillar' of support while the other does the drill.
- Each pair works on one hurdle.
- Ensure correct orientation of hurdles to allow for hurdles to topple when hit.
- **Activity**: One student stands beside the hurdle with lead foot slightly ahead of the hurdle and leans forward, relying on the partner for support (partners stand face-to-face grasping each other's shoulders). The 'active' partner performs a continuous rotary action of the trail leg over the side of the hurdle; e.g., trail leg around, short delay, trail leg around/short delay.

### HURDLE TRAIL LEG ACTION WHILE WALKING/MARCHING

- **Set up**: In several lanes, place four low hurdles (approximately 24 to 32 inches high) about one metre apart. Divide the students up evenly among the lanes to maximize activity.
- **Activity**: Students take turns walking or marching beside the row of hurdles, sweeping the trail leg laterally over the barrier; e.g., walk, trail leg action, walk, trail leg action, walk, etc.). Look for the body to stay tall and facing forward throughout the trail leg action. The lead foot must step at least even with the hurdle, but preferably a little ahead of the spot where the hurdle is located. Students should try the trail leg action on the right and left sides of the row of hurdles.
- Same as above but this time the students focus on proper arm action. Look for the arm to counter-balance the trail leg movement so that, as the right trail leg sweeps laterally forward, the right arm sweeps laterally backward.





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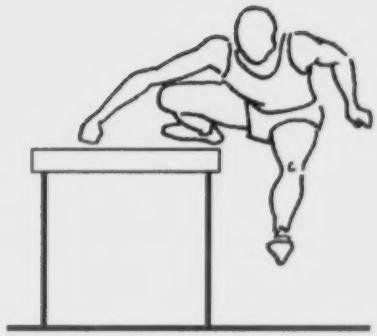
**HURDLE "LEAD", "TRAIL" COMBINATION WHILE WALKING/MARCHING**

- **Set up**: Same as above.
- **Activity**:
  - While marching down the center of the lane, the students clear each hurdle with proper lead leg action (directly forward over the hurdle and energetic down-sweep), followed immediately by proper trail leg action (as introduced above).
  - Repeat but focus on the proper arm action.

**HURDLE TRAIL LEG ACTION WHILE RUNNING AT MODERATE PACE**

- **Set up**: Same as above, but spread the hurdles to five to seven metres apart.
- **Activity**: Students take turns running lightly beside the row of hurdles and at each hurdle, taking off, doing a quick trail leg action without exaggerated lead leg action. Right and left sides should be attempted. Look for smooth running pattern between hurdles and quick trail leg "attack" on each hurdle, with sweeping (backward) motion of trail arm acting in opposition to the leg.



**HURDLE "LEAD", "TRAIL" ("1,2") COMBINATION WHILE RUNNING AT MODERATE PACE**

- **Set up:** Hurdles spread out five to eight metres apart; e.g., five metres apart in one lane; 6.5 metres apart in the next lane; eight metres apart in a third lane.
- **Activity**: Students now run at moderate pace down the center of the lane of hurdles keeping a smootn running pattern and attacking each hurdle with a "1,2" step of the lead and trail legs. If the students run an even number of strides between the hurdles they will automatically alternate right and left lead legs. If an odd number of strides is taken (three or five being the most likely), then the students will have to experiment with right and left sides on different repetitions of the hurdle set.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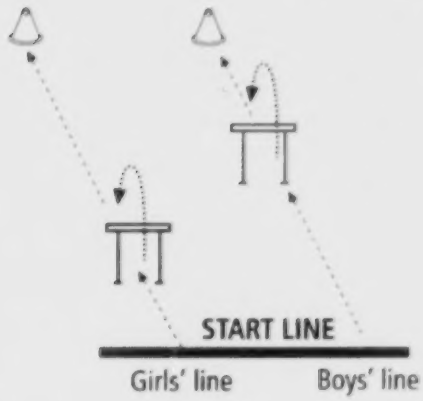
**SPRINTING OVER ONE HURDLE (STANDING START)**

- **Set up**: Place one hurdle in each lane at the age-specific "standard," the first hurdle distance from the starting line (some at the men's distance; some at the women's distance). Place a cone in each lane 10 metres beyond the hurdle.
- **Activity**: Students practice sprinting from the starting line (standing start) over one hurdle to the cone, using an eight-stride approach and proper lead leg, trail leg action over the hurdle. The trail leg is the one that goes on the start line, lead leg behind. Students should be aware of leg preference by this time.

**SPRINTING OVER HURDLE**




**Materials**

- hurdles, cones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# Hurdles - Level 4

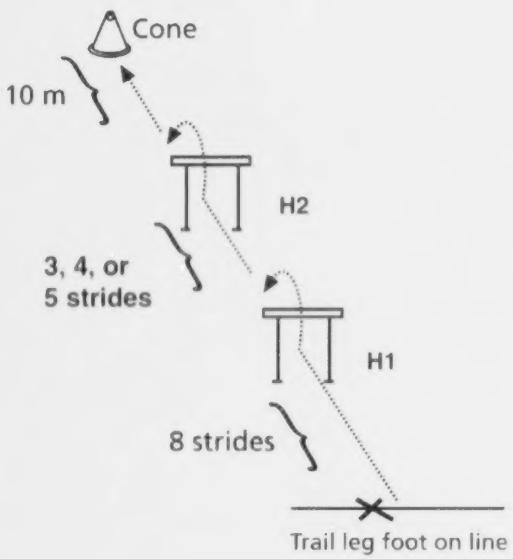
## Learning Activities

**SPECIFIC PREPARATION**

- Repeat choice of progressions from Levels 1 to 3 as a final warm up preparation for vigorous hurdling; e.g., rhythmic running over low obstacles as a relay game, trail leg and lead leg marching drills as in Level 3, culminating in sprints over one hurdle.

**SPRINTING OVER 2 HURDLES**

- **Set up**: In several lanes, place two hurdles at standard hurdle heights and distances (a couple of lanes at the men's settings; others at the women's settings). Place a cone 10 metres past the final hurdle.
  **Safety tip**: Ensure that hurdles are oriented properly—so that they can fall over when/if hit.
- **Activity**: From a standing start, the students run from the starting line (take-off foot on the start line) over two hurdles, getting used to the stride sequence—eight strides to hurdle 1 (H1) and 3, 4, or 5 strides between H1 and H2, depending on which pattern fits the most comfortably to promote regular sprinting between the hurdles. Once the preferred number of strides is established for each student, the lesson progresses to include more hurdles.
  **Technical note**: The goal is to run three strides between each hurdle, but most students are not fast enough and/or strong enough to achieve this pattern. Remind the students that the run between the hurdle must be quick and unvaried. Some students tend to hop or reach a little to accommodate a certain stride pattern between; e.g., Instead of "1, 2, 3" between, they may do something like "1..., 2, 3". Also, ensure that students sprint past the cone as opposed to decelerating as they come off the last hurdle.



### SPRINTING OVER 3 TO 5 HURDLES

- Same **set up** and **activity** as above, but now add hurdles one at a time to each lane, with the students attempting to run over the hurdles from a standing start.
  Look for the stride pattern to be consistent from one hurdle to the next (e.g. 8, 3, 3, 3, or 8, 4, 4, 4, etc. or 8, 5, 5, 5) and remind the students to run past the cone at the end.

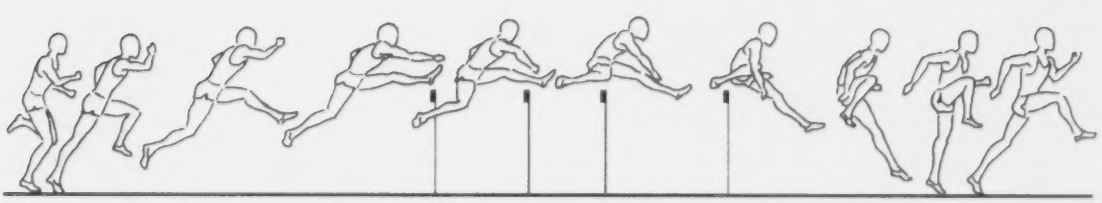
### SPRINTING OVER 1 HURDLE FROM STARTING BLOCKS

- **Set up**: Have the students set up starting blocks according to the method discussed in "Starts—Level 3." (Take-off foot goes in the front, lead leg behind in the starting blocks.) Place a cone 10 metres beyond the hurdle for the students to sprint past.
- **Activity**: On the commands, "on your mark," "set" and "go," the students drive from the starting blocks and accelerate, attacking the first hurdle with "1,2" rhythm and proper lead leg and trail leg action.
  Look for vigorous arm swing throughout to assist in the proper execution of sprinting, hurdling and sprinting off the hurdle past the cone. Maintenance of "tall" and "proud" body posture throughout.

### SPRINTING OVER 2 TO 5 HURDLES FROM STARTING BLOCKS

**Materials**

- hurdles, starting blocks, cones, chalk



Sprint Hurdles—Full Sequence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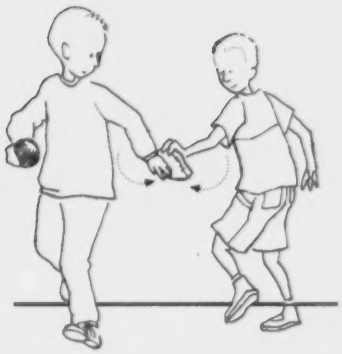
# Relays - Level 1

## Learning Activities

**MOVE AN OBJECT FROM HAND TO HAND**

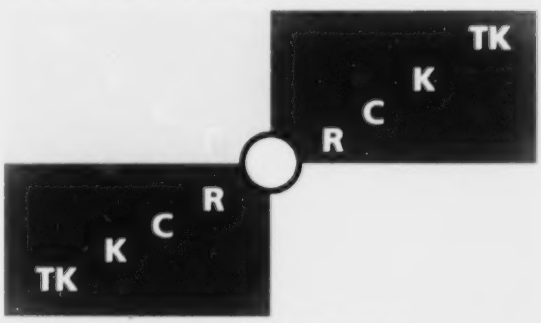
- While on the run each student carries a bean bag, small rubber ball or other small object.
- Students jog around the track, field or gymnasium passing from hand to hand:
  - on their own
  - on command
- Students run in any direction passing from hand to hand.



**PASS TO OTHERS IN ANY DIRECTION**

- Divide the playing area into four quarters and divide your class into four equal teams to play "Treasure Keepers".
- Have your teams divide further into "raiders," "couriers," "knights," and "treasure keepers."
- Divide each quarter into four areas where each of the sub-groups are to be (raiders are to be in raiders area only).
- Each team raids the center vault (hoop) where a large number of objects are kept.
- Students are only allowed to carry one object at a time and must pass to another student in the area next to them until the "treasure" is passed to a "treasure keeper" who deposits it in the team vault.
- The team that wins is the team that has passed the most objects into their team vault.
  - Look to even out the competition by explaining that the King demands that everything be returned to the royal treasury (centre)—this reverses the process and gives an advantage to the slower teams as they have fewer objects to pass.
  - Variations = left to left hand, right to right, right to left, left to right.

TREASURE KEEPERS




STUDENTS MUST PASS FROM ZONE TO ZONE

**Materials**

- bean bags, small rubber balls, small blocks, pins, hula hoops, pylons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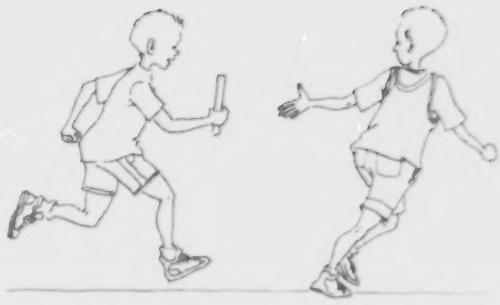
# Relays - Level 2

## Learning Activities/Teaching Strategies

**INTRODUCE "VISUAL" EXCHANGE (4 x 200m, 4 x 400m races)**

- Explain to the students that the visual exchange is the safest way to exchange the baton and that it is used in the longer relays. It is especially useful in allowing the outgoing runner to observe the degree of fatigue of the incoming runner (plus race conditions). The outgoing runner can, then, select the appropriate running speed and can adapt to last-second baton movement as it is handed over.
- Explain and demonstrate the technical characteristics of the visual exchange:
  a. Outgoing runner faces the inside of the track and holds the left arm out to receive the baton (fingers extended and thumb pointing to the sky).
  b. Outgoing runner accelerates to match the speed of the incoming runner.
  c. Incoming runner holds the baton upright with the right hand and reaches towards the outgoing runner.
  d. Outgoing runner takes the baton with the left hand and changes it immediately to the right hand.



**"VISUAL" EXCHANGE AT LOW RUNNING SPEED (4 x 200m, 4 x 400m races)**

- Line students up in groups of six to eight and spread out approximately five metres apart in line.
- The baton starts at one end and is passed from one end of line to the other from student to student using a short run up and visual exchange.
  a. Look to encourage a constant speed of the baton by allowing the students to visually observe the passing process.
  b. Run through in the same direction three to five times.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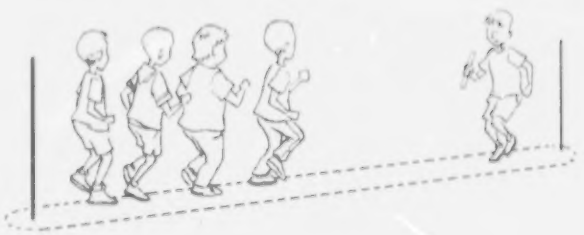
**AT FASTER RUNNING SPEED**

- Pair the students up and divide the activity area in two.
- One student is positioned halfway to the finish, while the other starts with the baton.
- Upon the start command, the first runner runs at moderate pace to the second and passes the baton.
- Both students work at keeping the speed of the baton up at the exchange.
- Students reverse directions and now the second runner starts and the first runner receives. Ensure that the students are passing the baton correctly—from right hand to left hand. It will require that each student transfer the baton from left to right hand immediately after receiving the baton in order to pass it on correctly.

**RELAY GAMES**

- Divide the class into teams of five or six that jog single file around two turning marks spaced 20 to 25 metres apart.
- On a signal, the first runner sprints away with the baton from the team, following the course until coming upon the last member.
- The baton is passed up through the team as they jog until the front runner gets it and sprints away on the course.
- The activity continues until everyone has "pursued" the rest of the team.



**Materials**

- relay batons, course markers or pylons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# Relays - Level 3

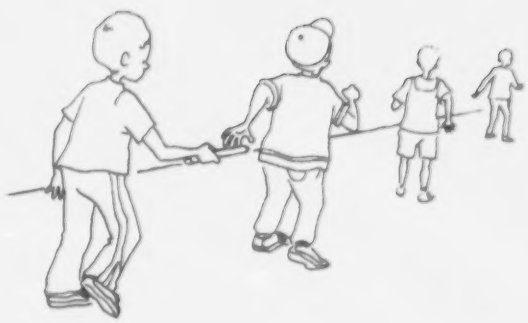
## Learning Activities

**INTRODUCE "NON-VISUAL" (4x100m) EXCHANGE**

- Explain to the students that the non-visual exchange consists of three phases: PREPARATION, ACCELERATION and TAKEOVER.
  - In the PREPARATION phase the incoming runner maintains maximum speed and the outgoing runner assumes a starting position.
  - In the ACCELERATION phase the runners synchronize their speed by maintaining maximum speed (incoming runner) and maximizing acceleration (outgoing runner).
  - In the TAKEOVER phase the baton is exchanged as quickly as possible.

**STATIC BATON PASSING**

- **Set up**: Divide the class into groups of four. Each group lines up in its own "lane" at one end of the field or gymnasium—one person behind the other, all facing forward.
  - Describe the "upsweep" baton passing technique to the students: Outgoing runner's hand is extended backward at hip level and incoming runner moves the baton **upwards** between the outgoing runner's widely spread thumb and index finger.
  - While standing on the spot, each member a comfortable distance behind the other, the groups of four practice the upsweep technique by passing the baton from the back of the line to the front in the following sequence: right hand – left hand – right hand – left hand. Right-to-right passing, or left-to-left, must be avoided, as it can result in one runner tripping the other during the baton exchange.



**WALKING BATON PASSING**

- Upsweep passing of the baton from back to front of each line of students continues as the groups walk in formation down the field (or gymnasium).
  Look for the students to develop their own verbal signals to notify the student ahead to show his/her hand to receive the baton.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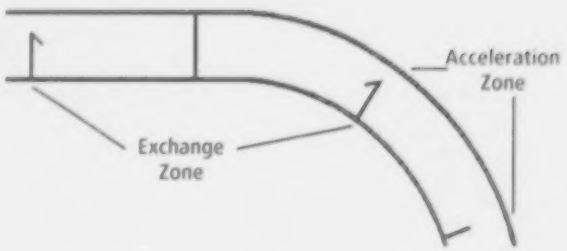
**BATON PASSING WHILE RUNNING SLOWLY**

- Same as in the walking baton above, but now the groups of four pass the baton while jogging in formation.

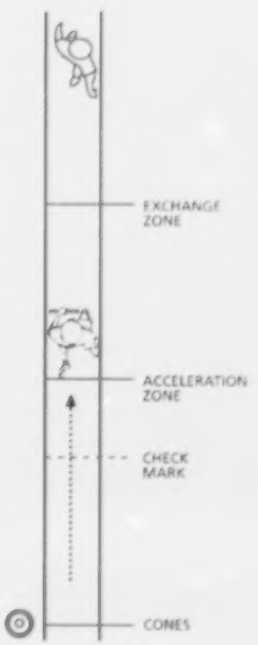
**INTRODUCE "ACCELERATION ZONE" AND "EXCHANGE ZONE"**

- Have all the students gather at the location of an exchange zone on the track and explain:
  - In a 4x100m relay the baton must be passed within the 20-metre exchange zone.
  - There is also a 10-metre acceleration zone where the runners are allowed to wait and gather speed before entering the exchange zone.
  - The outgoing runner needs a check mark (usually from 15–25 foot lengths) on the ground in front of the acceleration zone to indicate when to start running (in order to avoid being overtaken by the speed of the incoming runner).
  - The outgoing runner must stand to one side within the lane (to the right of the lane when receiving the baton in left hand; to the left of the lane when receiving the baton in right hand) to allow the incoming runner running space within the same lane.




**BATON PASSING WHILE SPRINTING**

- **Set up**: In as many lanes as there are pairs of students, create acceleration and exchange zones with chalk on the straight portions of the track. Place cones at about 20 m in advance of these zones to indicate where the incoming runners should start.
- **Activity**: Students work in pairs, role-playing incoming and outgoing runners and practicing right-to-left passes and left-to-right passes. The incoming runner accelerates from the cone and the outgoing runner starts to run when the incoming runner arrives at the check mark. The outgoing runner continues to accelerate into the exchange zone and does not look back; only extends the appropriate hand when the incoming runner shouts a verbal cue; e.g. "hand!".
  Optimal check points for a pair of individuals are arrived at through trial and error. It takes a number of practice runs at maximum speed to get it right.




**Materials**

- baton, cones, chalk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# Relays - Level 4

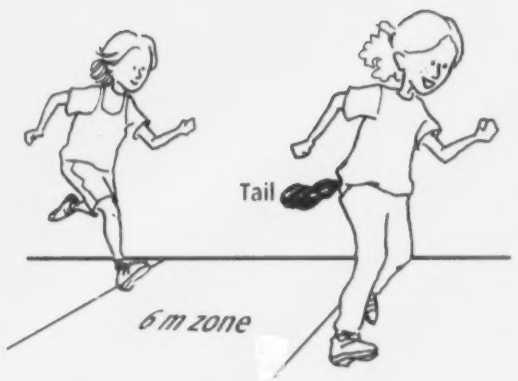
## Learning Activities

**SPECIFIC PREPARATION**

- Repeat basic progressions discussed in Level 3 Relays.

**ACCELERATION RUNS**

- **Set up**: Have the students work in pairs. Mark a 6-metre zone on the track or field. Place a cone indicating a 15-metre run-in toward the zone and have a line down the field representing the finish line. Each pair of students is given a flag football "tail."
- **Activity**: "Capture" the flag on a moving runner. One partner puts on the tail and waits at the end of the 6-metre zone. The other partner starts running from the cone and accelerates toward the waiting partner. The partner with the tail starts running when the incoming runner enters the 6-metre zone and tries to avoid having the flag taken by the incoming partner before reaching the finish line.




**NON-VISUAL PASSES AT INCREASED SPEED**

- **Set up**: Students continue to work in pairs in lanes on the straight portions of the track.
- **Activity**: With one partner running slightly behind the other partner (at medium to fast speed), the baton is passed two to three times over a 50- to 70-metre distance using the upsweep technique; i.e., the rear partner delivers the baton, the front runner accepts the baton and hands it back to repeat the cycle—while both continue to run at the same speed with no slowing as the baton is being passed back and forth. Partners should practice passing on both sides (left to right; right to left).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**NON-VISUAL EXCHANGE ON THE CURVE**

- **Set up**: Partners now move to 4x100m relay exchange zones on the track.
- **Activity**: Non-visual exchanges are practiced in the same manner as in Level 3 Relays, Last Stage, but now using the standard exchange zone marks on the curve. Each of the partners practices both the incoming and outgoing roles. Outgoing runners should attempt various starting stances; e.g., standing start; three-point start; both hands on the track.
  **Technical note**: When the exchange zone is at the beginning of a curve, the baton is passed from the left hand of the incoming runner to the right hand of the outgoing runner; at the end of a curve the baton is passed from the right hand to the left hand.

**WHOLE SEQUENCE: 4x100M RELAY RACES**

- Teams of four race against each other using the whole track or shorter distances.

**Materials**

- baton, cones, chalk, flag football 'tails'

Non-visual Relay Exchange—Full Sequence


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# JUMP

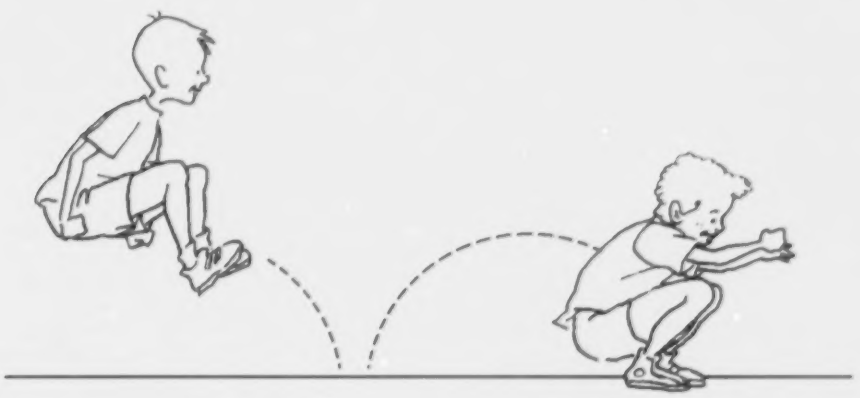
## Skill Progressions at a Glance

### General Criteria

- Movement sequence: a. approach; b. takeoff; c. flight; and d. landing
- Approach is consistent and prepares athlete for powerful takeoff; speed builds to takeoff
- At takeoff jumper's posture must be "tall" or "proud"
  - foot is planted in a fast, flat "pawing" action, not stamped or bracing
  - knee of free leg is punched through from hips
  - hip, knee and ankle joints are fully extended
- In flight, avoid movements that detract from desired flight path
- Landing must be safe and minimize loss of distance

### Safety for the Jumps

- Takeoff points clear of debris (no slipping)
- Takeoff point allows jumper to land in the safest part of the landing area
- Sand well dug and raked frequently
- Foam landing units thick and dense enough
- Foam landing units fastened together well
- Only circular cross section bars (rope or elastic for beginners)

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## Jumping Skills Criteria and Progressions at a Glance

| | High Jump | Long Jump | Triple Jump |
|---|---|---|---|
| | • "J" approach and quick last stride (takeoff)<br>• Gain vertical lift by driving the arms, shoulders and knee of free leg<br>• Go for maximum lift before continuing movement over the bar<br>• Lift the hips, then the legs to clear the bar | • Maintain speed up to and through takeoff<br>• Hips lift forward and upward with knee drive at takeoff.<br>• Arm and leg movement in flight helps combat forward rotation of body or "face plant"<br>• Delay the leg extension to landing till the last moment<br>• Keep feet off the ground as long as possible | • Active landings of the foot help maintain velocity<br>• Keep the trunk upright and centered throughout<br>• "Cycle" the take-off leg during the hop<br>• Vigorous drive of the free leg couples with strong double punch of the arms on the second takeoff<br>• Drive vigorously forward and upward on final takeoff |
| **Level 1** | • Double foot jumps for height<br>• "High" skipping with vigorous knee drive and arm and shoulder punching<br>• Single foot jumps over object at an angle<br>p. 40 | • Double foot jumps for distance (single or continuous; e.g., frog jumps across the floor)<br>• Takeoff from single foot (right, then left) and land on two<br>• Jump-ups onto benches or boxes straight on<br>p. 46 | • Single leg hopping (RRRRR or LLLLLL)<br>• Games and fun activities involving rhythmic hopping (many combinations): e.g. RRLLRRLL or RRRLLLRRRLLL or RRLRRLRRL or LLRLLRLLR<br>p. 54 |
| **Level 2** | • Double foot jumps over a low obstacle<br>• Hurdle "hops" for height (five steps between) and landing on takeoff leg<br>• Running in tight curves with good knee drive<br>• Scissor jumps from an angle over knee-height elastic landing on gymnasium mat<br>• "1...2,3" rhythm<br>p. 41 | • "Straight knee" ankle hops over low obstacles; e.g., sticks, hoops, cones, ladders<br>• Bounding from a standing start<br>• Hurdle bounds for height (about five steps between)<br>• Take off from single foot and land on two from a few strides<br>• "1...2,3" rhythm<br>p. 48 | • Standing triple jump progression on a grid with each student finding personal level for<br>– hop<br>– hop and step<br>– hop and step and jump<br>• Try starting on right, then left foot<br>p. 55 |
| **Level 3** | • Hip flexibility stretches<br>• Scissor jumps from three- to five- step curve (ensuring safe takeoff point)<br>• Scissor jump from seven-stride approach (four strides straight; three strides on the curve)<br>p. 42 | • Telemark jump (lunge jump) from three-to-five steps "1, 2, 3...4,5" five stride approach rhythm<br>• Telemark jump off low box, landing in soft pit<br>• Sail technique off low box, landing in soft pit<br>p. 50 | • "1, 2, 3...4,5" five step run ups with<br>– hop<br>– hop and step<br>– hop and step and jump<br>• "Cycle" the take-off leg during the hop<br>p. 56 |
| **Level 4** | • Standing high jump (back to elastic)<br>• Scissor Jump to sit landing<br>– land sitting with legs parallel to the bar<br>– land sitting with legs 90 degrees to the bar<br>• Fosbury flop off three- to five-step curve<br>• Fosbury flop off seven- to nine-step approach<br>p. 44 | • Sail technique off five-step approach<br>• Landings from five-step approach<br>• Hitch-kick or hang technique off five-step approach using a low box<br>• Full approach runs with "pop-up" off board<br>• Full approach runs with hitch-kick or hang technique and efficient landing<br>p. 52 | • Bounding from a short approach<br>• Hopping from a short approach (combinations: e.g., RRRRRR; LLLLLL; RRLRRL; LLRLLR)<br>• Hop, step and jump from box using five step run up<br>• Hop, step, jump from Full Approach<br>p. 58 |


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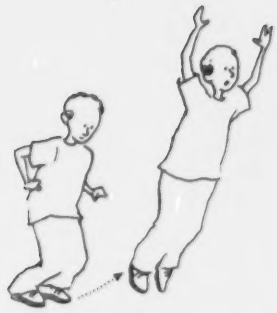
# HIGH JUMP - LEVEL 1

## Learning Activities

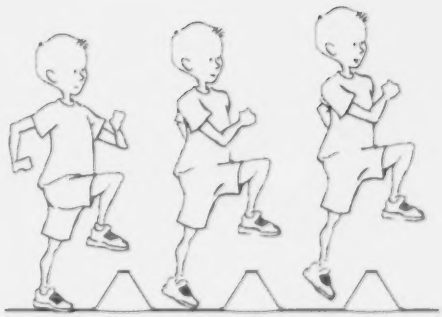
### DOUBLE FOOT JUMPS FOR HEIGHT

- Posture remains tall while jumping.
- Hip, knee and ankle joints should be fully extended during the jump.
- Double foot jumps in place (skipping rope/games).
- Double foot jumps over six to eight medicine balls placed at suitable distances for jumping over.
- Long rope skipping with two partners holding ends of the rope with a third one skipping with run in and run out from both sides.



### "HIGH" HOPPING WITH SKIPPING RHYTHM

- High skipping refers to gaining height in the skip; e.g., RR, LL, RR, LL, etc. Knee of the free leg is driven to hip height and held during time in the air.
- Arms are driven in a punching motion to coincide with knee drive.
- High skipping over medicine balls or low hurdles; e.g., R•R, L•L, R•R., etc.
- High skipping over progressively higher obstacles; e.g., R•R, L•L, R••R, L••L, R•••R, L•••L–dots denote a gain in height

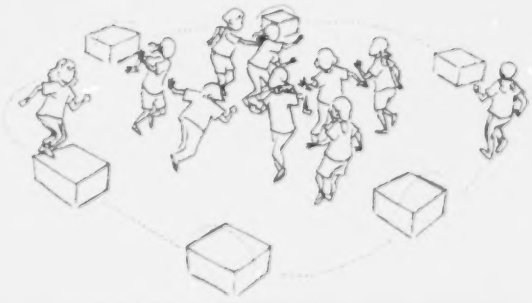


### SINGLE FOOT JUMPS

- Leaps over low obstacle at an angle
- Walk up to the bench at an angle, jump off of outside foot, drive the knee of the inside leg up, and land on the bench with two feet. Try from both sides and different angles. The body must stay tall during this activity.

### JUMPING GAME

- A variety of boxes and other objects are set up in an obstacle course around a square. Choose four or five students to be "it". Start everyone inside the square. Tagged students must run a lap of the obstacle course, jumping over the obstacles, before being allowed back inside the square. The goal of the taggers is to get all the other students out of the square at the same time.



**Materials**

- small equipment to make an obstacle; benches, boxes, sticks across pylons, mats, medicine balls or bean bags or small rings or small pylons, sticks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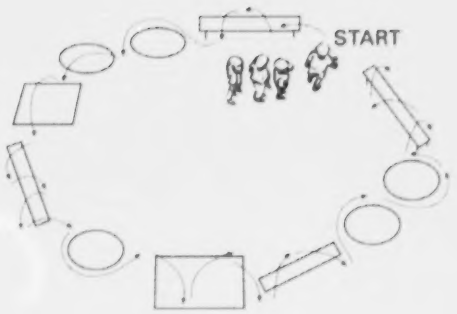
# HIGH JUMP - LEVEL 2

## Learning Activities

**DOUBLE FOOT JUMPS OVER LOW OBSTACLE**

- Students must remain tall while jumping.
- Hip, knee and ankle joints should be fully extended during the jump.
- Play "Over the Puddles"—benches, hoops or skipping ropes and mats are set out in a loop, representing a water area. The goal is to jump over the obstacles, treating them as puddles. Allow jumping over the sides of puddles to accommodate individual abilities. Try racing the inside loop versus the outside loop to challenge all levels and abilities in the same game.




**HURDLE HOPS FOR HEIGHT**

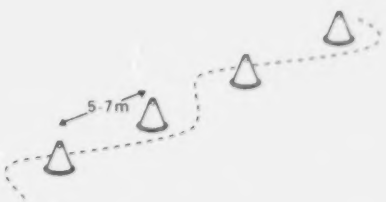
- Set up several rows of five low obstacles; e.g., sticks on pylons, mats on end, blocks. Vary the distances between obstacles in each row to suit various leg lengths. Take five steps between and land on takeoff leg.

**TAKEOFF SIMULATIONS FROM A SHORT, CURVED APPROACH**

- To improve the vertical takeoff, make a curve and a starting point.
- Increase the stride frequency in the final strides.
- Use branches of trees, soccer goal crossbar, football upright crossbar to reach for.

**RUNNING IN TIGHT CURVES WITH HIGH KNEE ACTION**

- Feel the inward lean and rhythm of the approach.
- Run in and out of markers or a figure-eight.
- Run fast but controlled.
- Increase speed when entering each curve.

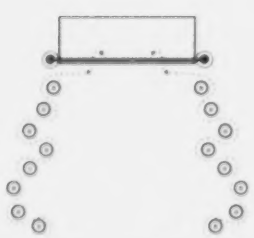



**SCISSOR JUMPS**

- From an angle over knee-height elastics landing on gymnasium mats.
- Use straight and curved approaches.
- Plant the takeoff foot in the line of approach.
- Use standing landings only.
- Keep increasing the heights.
- Use a series of low obstacles to jump over—benches, sticks on pylons, stacked mats, low boxes

**JUMPING GAME**

- "Slalom Approach Run"—design an interesting, irregular slalom course using eight to ten cones. Changing the body angle with the changing course will help with the high jump approach. Students scissor kick over the suspended rope or elastic.



**Materials**

- mats, ropes, landing mat, hoops, skipping ropes, benches, elastic band to jump over, sticks, blocks, pylons to make obstacles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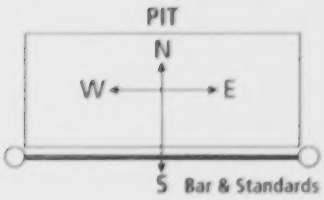
# HIGH JUMP - LEVEL 3

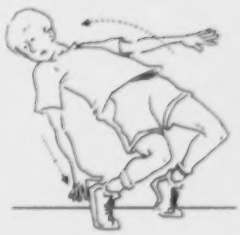
## Learning Activities

- Terms of reference: For the sake of clarity, compass directions (N, E, S, W) will be used in the High Jump lessons to describe orientation; the high jump bar will run from East (right end) to West (left end) as illustrated.



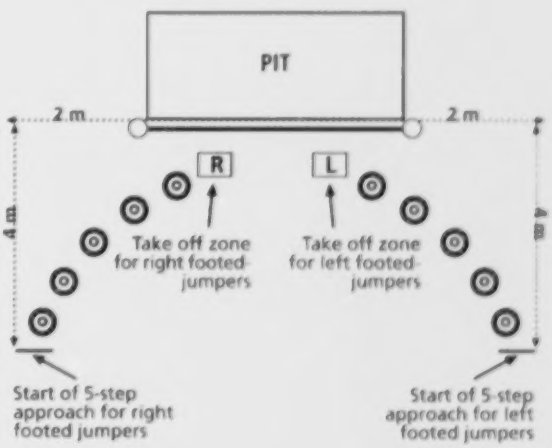

**SPECIFIC HIP/ABDOMINAL STRETCHES FOR HIGH JUMP**

- The two types of stretching drills below may be added to the general warmup as a form of specific preparation for the high jump.
  **Technical note**: Even though students do not progress to flop jumps in Level 3, it is useful for them to begin to develop the hip lifting capacity at this stage.
  - Heel touches—with feet shoulder width apart, hips are pushed forward to create a smooth arch of the back. Holding this position firmly, (no bending forward at the hips!) attempt to touch the right heel with the right hand and stand up without falling over. Repeat on the left side—left hand to left heel
  - Hip punches—from a supine position, hips are pushed as far off the floor as possible while shoulders and arms remain relaxed on the floor or stretching mat.



**CREATING A THREE- TO FIVE-STRIDE CURVED APPROACH**

- **Set up**: On each side of the high jump area place a cone at a spot two by four metres away from each high jump standard. Place another cone one metre south of each standard. Now form a curve between these two cones with four to six more cones.
  You may also want to draw (with chalk) a square area on the floor between high jump standard and cone on each side to indicate the "takeoff zone."
- **Activity**: Have the students work in pairs: starting with a foot inside the takeoff zone, one partner runs south following (outside) the curve delineated by the cones while the other partner watches and places a chalk mark on the ground at the three-stride (or five-stride) location.





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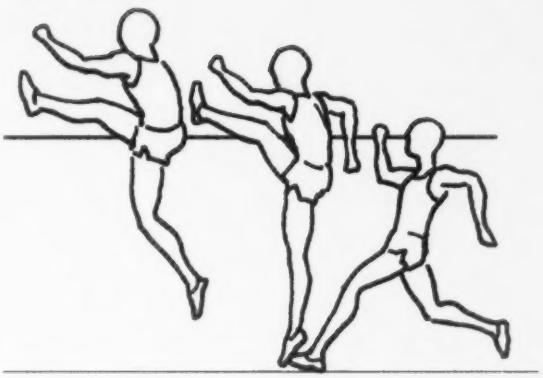
**SCISSOR JUMPS FROM THREE- TO FIVE-STRIDE CURVED APPROACH**

- Students use the three-stride (or five-stride) **approach** created above to take off and scissor over the bar (elastic).
  **Technical note**: An odd number of strides means that the jumper stands with opposite foot to the jump foot on the starting mark before commencing that approach run. Students should land standing on the opposite foot. Right foot jumpers run from the west side, left foot jumpers run from the east. Students should try a few jumps on each side to determine which foot feels strongest.
- Remind students of the correct run-up rhythm: (1...2, 3) or (1, 2, 3...4, 5)
- Look for tall upper body posture and strong knee lift of the free leg at takeoff



**SCISSOR JUMPS FROM SEVEN-STRIDE APPROACH**

- Add two more running strides straight south from a five-stride mark and continue to practice jumping at gradually higher heights.

**Materials**

- high jump mats, standards, bar (rope; elastic), chalk; cones

# HIGH JUMP - LEVEL 4

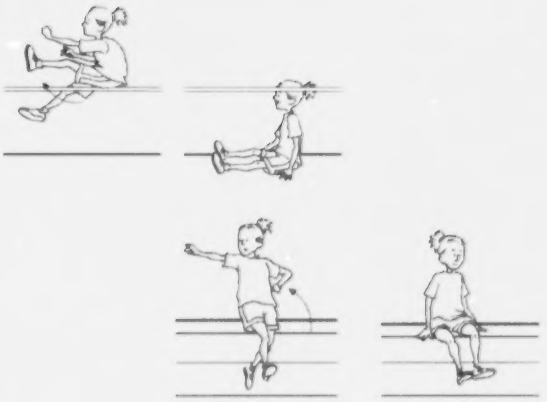
## Learning Activities

### SPECIFIC PREPARATION

- Repeat stretches and preliminary progressions discussed in Level 3. Look for proper rhythm on the five-stride curved approaches—1, 2, 3....4, 5—and a strong, quick knee drive to hip height at takeoff.

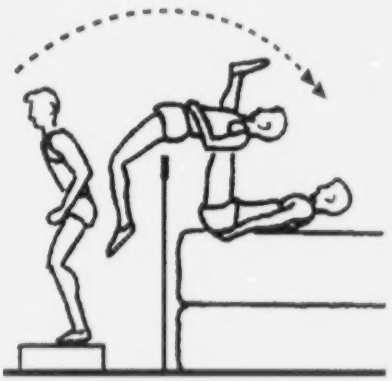
### SCISSOR JUMPS TO SIT LANDING

- **Set up**: Use the same approach as five-stride scissor jumps (see Level 3 progressions).
  - Take off as in a regular scissor jump, but land sitting, trunk upright with legs together and parallel to the bar.
  - Remove the bar and stack the mats to create a higher landing pit. Students run, take off, turn 90 degrees in the air and land sitting upright on top of the mats with legs together and body facing directly south (Refer to orientation terminology established in Level 3).



### STANDING FLOP ("BACK-OVER" JUMPS)

- **Set up**: Place a low, sturdy box up against the centre, south edge of the high jump mat and use an elastic or rope bar. (**Safety note**: make sure the jumping box is lower than the landing surface.)
- **Activity**: Students stand on the box with backs to the bar and attempt to clear the bar by jumping up and back off two feet, actively lifting the hips, then legs over the bar and landing on the upper back. (**Safety note**: ensure that the knees are spread apart slightly throughout the movement or the knees can come down and hit the nose or face on landing.) The bar is set at height of the hips and gradually moved up as students get better at the drill.

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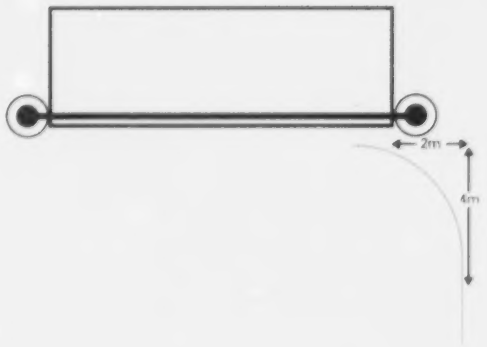
**FLOP JUMPS FROM FIVE-STRIDE APPROACH**

- With the same five-stride approach as in the scissor **jumps**, the students now take off, turn their backs to the bar, clear the bar with the hips and legs, and land on the upper back. (**Safety note**: If the takeoff spot remains at the near end of the bar students should run little risk of falling off the opposite side of the mat on landing. Jumps from mid-distance between the two standards, however, will automatically put a student at risk.)
  For some students, the tendency will be to "dive" straight at the bar or even down. Emphasize jump UP, first, then go over the bar.

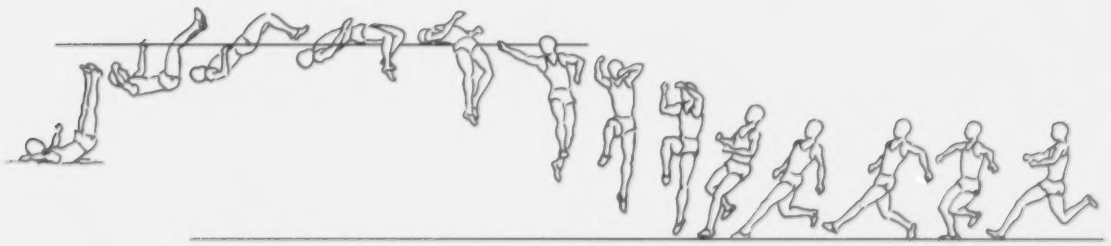
**FLOP JUMPS FROM SEVEN- TO NINE-STRIDE APPROACH**

- **Set up**: Leaving a mark to indicate the start of the five-stride approach, run back (**straight** south) two to four strides and put another chalk mark on the ground there.
  The approach should now resemble the letter 'J', starting with a straight section and finishing on a curve.
- **Activity**: Students now practice flop jumps from this "full" approach. Once the approach is consistent, the lesson ends with jumps over gradually increasing height.




**Materials**

- high jump mats, standards, bar (rope; elastic), chalk; cones, jump box



High Jump—Full Sequence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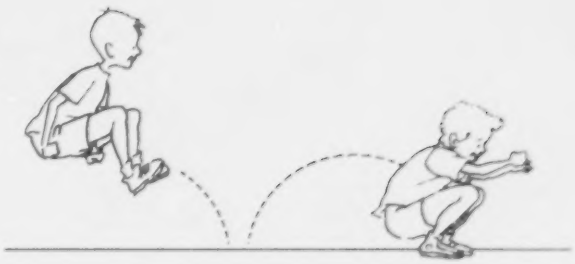
# LONG JUMP - LEVEL 1

## Learning Activities

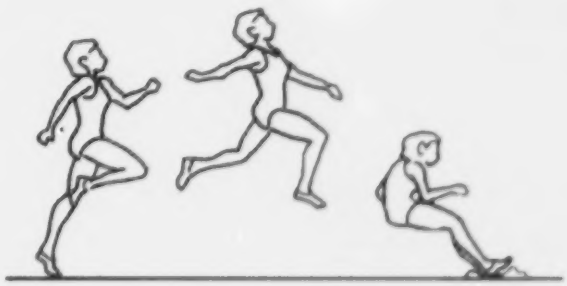
**DOUBLE FOOT JUMPS FOR DISTANCE**

- Students find their own space in the gymnasium/learning area.
- Students jump as high as possible, repeating a number of times.
- Repeat, stressing bending of knees and ankles, swinging arms.
- Still taking off two feet and landing on two feet, jump as far as possible.
- Students line up and frog jump with two feet. Repeat jump. Continue across the gymnasium.
- Students line up again and this time frog jump as quickly as they can across the gymnasium.
- Students repeat, but this time count the number of jumps it takes to cross the gymnasium (continuous jumps, stress bent ankles and knees, swinging arms).
- Students see if they can get across the gymnasium in fewer jumps.



**TAKE OFF FROM A SINGLE FOOT AND LAND ON TWO**

- Students now run three or four strides and jump as far as they can.
- Try different takeoffs and landings; e.g., takeoff from one foot, land on the same foot (hop), takeoff from two, land on one, takeoff from one, land on the opposite foot (bound).
- Discuss most effective takeoff and landing; e.g., takeoff on one foot, land on both.



**JUMP-UPS ONTO BENCHES OR BOXES (FROM A STANDING POSITION)**

- Students line up in front of benches or boxes or another a stable surface.
- Students jump high and land under control on the bench. Stress swinging of arms in opposition to legs, extension of jump leg, knee and ankle at takeoff.
- Repeat, stressing vigorous lifting of the knees.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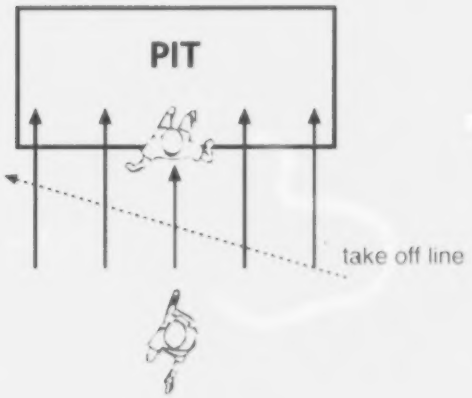
**FROG JUMPING RELAY**

- The first person on a four or five person team jumps as far as possible using a two-foot takeoff and landing. The next person jumps from where the first person landed, until the team has finished. Each team tries to jump as far as they can, trying to go a little further each time.

**JUMP FOR DISTANCE**

- Use both standing jumps and jumps from a short run-up.
- Arrange takeoff line as shown—the students move farther up the line to continue to challenge themselves to reach the landing area. If possible, measure and record the jumps.




**Materials**

- benches, boxes or other stable, fairly wide structures, tape measures

# LONG JUMP - LEVEL 2

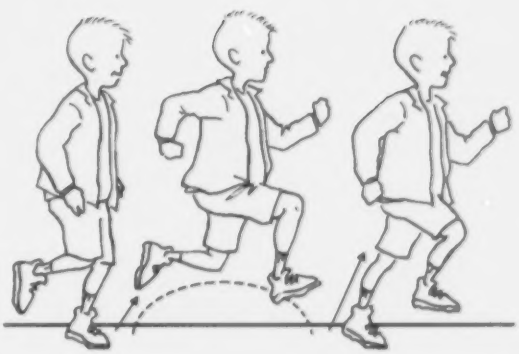
## Learning Activities

**"STRAIGHT KNEE" ANKLE HOPS OVER LOW OBSTACLES**

- Place three or four lines of very low obstacles on the floor; e.g., sticks, ropes, hoops.
- Students bounce two-footed over obstacles, trying to use ankle flexion only (little or no bending of the knees)
- With the obstacles spread a metre or so apart, the students bounce a number of times between obstacles as well as over them.
- As soon as the first student in line has bounced over the first obstacle in the line the next student can begin.
- Repeat using single foot straight knee ankle hops (emphasize "active" ankle).

**BOUNDING FROM A STANDING START**

- In a line, students bound across the gymnasium under control: (LRLR, or RLRL)
  - emphasize a vigorous knee drive of the lead leg upward and forward and extension of the takeoff leg
  - try to "hang" in the air before bringing the lead leg back to the ground
  - keep upper body erect—don't bend forward at the waist
- Repeat, bounding as quickly as possible across the gymnasium.
- Repeat, taking as few bounds as possible.



**OBSTACLE "LEAPS" FOR HEIGHT (FIVE STEPS BETWEEN)**

- Set out four or five lines of low obstacles with different spacings. Obstacles can be blocks with doweling, small cones with doweling, scissor hurdles set at very low heights.
- Students run four or five strides and hurdle leap (bound high) over an obstacle, take five more steps and bound high over the next obstacle, etc.
  - drive up "free" or lead leg—thigh parallel to ground, extend jumping leg completely
  - upper body stays tall/proud

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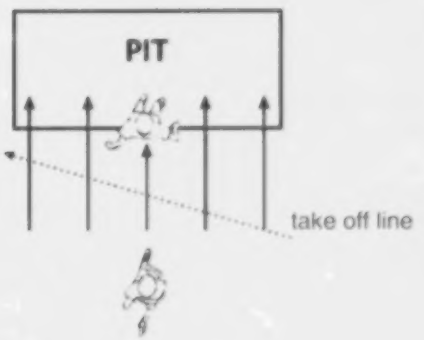
**TAKE OFF SINGLE FOOT AND LAND ON TWO**

- Students now run three or four strides and jump as far as they can, taking off from one foot and landing on two.
- Jump for distance using a short run up.
  - Arrange takeoff line as shown—students move farther up the line to continue to challenge themselves to reach the landing area. If possible, measure and record jumps.

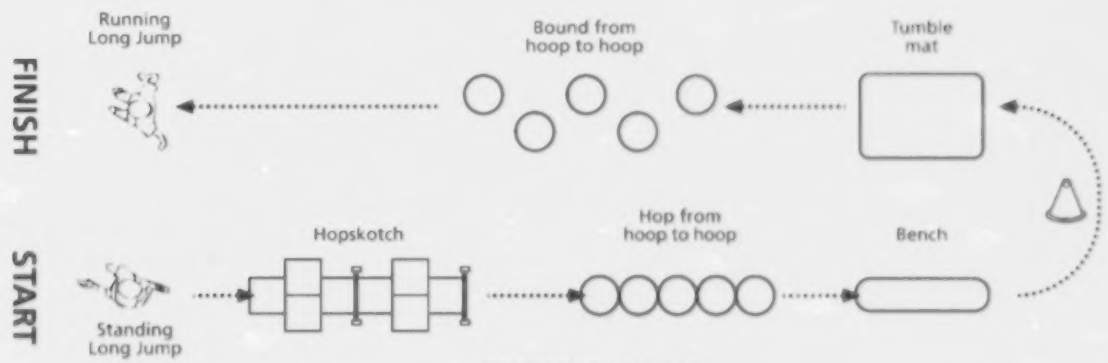



**"1..2..3..4, 5" RHYTHM (INCREASED STRIDE FREQUENCY AT THE END OF THE RUN-UP)**

- Students take five-stride run and jump for distance while keeping rhythm of strides even.
- Students repeat, but this time make a conscious effort to make the final two foot strides quicker than the previous ones. The result should be a longer jump than that accomplished with even rhythm.
- In pairs, the first takes a five-stride approach and jumps, using either an even stride rhythm or an increased stride frequency at the end (1..2..3..4, 5). Partners stand with their backs to the jumpers and try to "hear" which rhythm has been used.
- Repeat a number of times.
- Reverse roles.

**JUMPING GAME**

- Obstacle course as shown.




**OBSTACLE COURSE**

**Materials**

- variety of sticks, ropes, hoops, small pylons, doweling, wooden blocks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# LONG JUMP - LEVEL 3

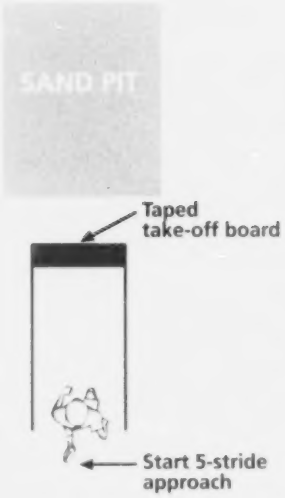
## Learning Activities

### SPECIFIC PREPARATION

- Repeat a few of the leaping activities described in Level 2.
- **Safety note**: Ensure that the sand pit is well dug and soft and that it is continually raked throughout the lesson. The students may benefit by wearing sweat pants, as some of the following drills can create friction on the knees.

### CREATING A FIVE STRIDE APPROACH

- **Set up**: Identify (draw with chalk or put tape down) a take off board area one metre away from the end of the sand pit. Have the students work in pairs with one piece of chalk per pair.
- **Activity**: Starting with one foot on the take off board area, students run away from the pit down the designated runway, and partners mark (with chalk or a cone) the location of the fifth stride. This mark becomes the students' starting mark for all of the five-stride drills. The mark may be adjusted forward or backward later, according to a student's foot position at take off.




### ESTABLISHING THE FIVE-STRIDE RHYTHM

- **Activity**: Have students start at their marks, run five strides in the (1..2..3..4, 5) rhythm, take off without looking at the board and run through the pit (landing on two feet is not necessary). At takeoff, partners note the position of the jumpers' foot with respect to the board area and suggest whether the five-stride starting mark should be moved forward or backward.
- This process is repeated until the students are taking off accurately and consistently from the board area and doing so with the correct rhythm. Emphasize the rhythm by counting it or clapping as the students do their approaches.
- **Technical note**: An odd number of approach strides (e.g., 3, 5, 7, 9) requires the student to stand with the non-takeoff foot on the start mark.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**TELEMARK JUMP ('LUNGE JUMP')**

- **Activity**: Students take off from the five-stride approach established above, hold the takeoff position in the air and land in a telemark (or 'lunge') position.
  - Look for the upper body to maintain a tall posture throughout the flight and landing.
  - Once the students get used to the leg position, start to emphasize that the arm action should also be strong and be in opposition to the legs to offer effective counter-balancing.
- **Safety note**: To reduce friction on the knee, ensure that the front foot and back foot (not the back knee) hold most of the body weight on landing.

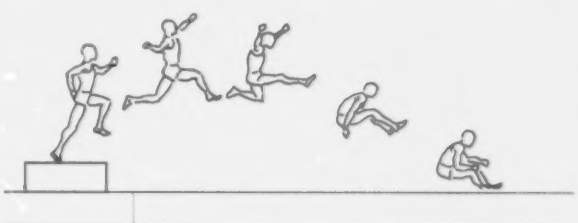
★ Jumping into a sand pit outdoors or indoors onto a foam pit from a raised surface.

**TELEMARK JUMP ('LUNGE JUMP') OFF LOW BOX**

- **Set up**: Place a high jump mat (or two) lengthwise to be used as a soft landing area. Place a low box—firmly stabilized to avoid tipping—in front of the mats to be used as an elevated take-off board.
- **Activity**: As above, but now with flight time increased, the students are challenged to hold takeoff position longer (e.g., they must fight the tendency of upper body to rotate forward at the hips—especially on impact—when landing in the telemark position.)
- Forward rotation of the upper body ("face plant") can be avoided by focusing on keeping the drive knee up throughout the flight. Keeping the front toe up will ensure that the landing is supported by the entire sole of the front foot.

**SAIL TECHNIQUE OFF LOW BOX**

- **Set up**: Same as above.
- **Activity**:
  - Students use their five-stride approaches to take off from the box just as above. The telemark position is held through most of the flight, but at the final moment, the jumper extends both legs forward to land sitting on the mat with legs straight (or slightly bent) out in front, feet together.
    **Technical note**: The Sail technique simply looks like a Telemark jump through take off and flight, but on landing both legs extend forward.
  - Repeat, but now remove the high jump mats and have the students jump from box into the sand pit, landing with two feet together in the sand.
- Ensure that five-stride rhythm (1..2..3..4, 5) is not abandoned while jumping from the box.



**Materials**

- shovel, rake, low sturdy box, chalk or cones, sand pit (well dug up), foam (HJ) landing mats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# LONG JUMP - LEVEL 4

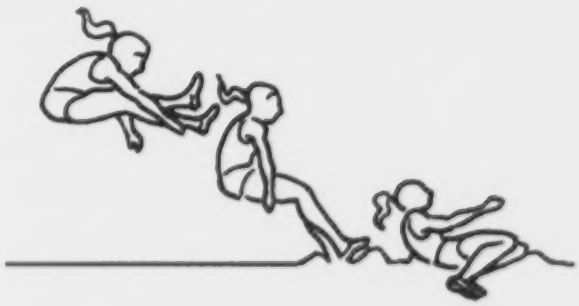
## Learning Activities

**SPECIFIC PREPARATION**

- Review progressions for Level 3 Long Jump.
- **Safety note**: Ensure that the sand pit is well dug and soft and that it is continually raked throughout the lesson.

**SAIL TECHNIQUE AND LANDING FROM SHORT APPROACH**

- **Set up**: Students should now have a consistent, five-stride approach set up on the runway.
- **Activity**:
  - Run five strides and jump as far as possible using the 'Sail' technique and landing with two feet together and as far forward as possible.
  - Repeat as above, but now focus on an efficient landing: As the feet hit the sand, the hips are immediately and actively pushed forward to the right or left side of the feet, so that the butt touches the sand even with the touch-down point made by the feet. The hips slide forward to one side or the other in a "hip-check" type move.



**"HANG" OR "HITCH-KICK" TECHNIQUE FROM SHORT APPROACH**

- **Set up**: Place a low box at the takeoff point.
- **Safety note**: Ensure that the box is stable (will not slip or tip under the weight of a forceful jump).
- **Activity**: With flight time increased by taking off from a low box, students can practice the "Hang" or "Hitch-kick" techniques. (Note: See full sequence illustrations at the end of this section.)
  - Remind students to maintain the proper five stride approach rhythm as they accelerate to take off. Also, accentuating a strong, sprinting knee lift during the approach allows for a quicker last step onto the box and, hence, a better knee drive at take off.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**ESTABLISHING THE FULL APPROACH**

- **Set up**: Have the students work in pairs, one piece of chalk per pair.
- **Activity**:
  - With one foot on the take off board, one of the partners runs 10 to 20 strides away from the pit, down the runway, while the other partner watches and puts a chalk mark on the ground at the desired spot. **Technical note**: One stride for each year of age between 11 and 17; e.g., 15 strides for a 15 year old. Stronger student athletes may be able to handle a longer approach than their age might dictate.
  - Students practice their measured approaches by running off the take off board and having their partners watch to see where the jump foot is located at take off. Ideally, the toe of the take off foot should be just a fraction behind the front edge of the take off board. This process is repeated a few times as approach marks are adjusted or fine tuned; e.g., If the toe is ahead of the board the approach mark must be moved back by the observed amount.
  - Once approaches become consistent, it can be useful to place a cone beside the runway at the location of "five strides to go". This visual cue serves as a reminder to the jumper to do the proper, five-stride rhythm to the takeoff at the end of the approach run.

Long Jump "Hang" Technique—Full Sequence

Long Jump "Hitch-kick" Technique—Full Sequence

**WHOLE SEQUENCE FROM FULL APPROACH**

- **Activity**: It is now time to long jump: Full approach, takeoff, flight ("Sail", "Hang" or "Hitch-kick") and landing.
  - Start marks for the full approach will have to be continually adjusted in a small way, back and forth, based on foot placement at the takeoff board.

**Materials**

- shovel, rake, low sturdy box, chalk or cones, sand pit (well dug up)


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# TRIPLE JUMP - LEVEL 1

## Learning Activities

**SINGLE LEG HOPPING (RRRRR OR LLLLL).**

- Students review what hopping is—take off from a single foot and land on same foot.
- Stand in line and hop across the gymnasium (10 to 20 metres).
- Race across the gymnasium, hopping.
- Students stand at one end of the gymnasium facing a partner who is at the other end of the gymnasium. On signal, both hop to meet in middle, touch hands and run back to starting point.

**RHYTHMIC HOPPING**

- Place groups of very low obstacles around the gymnasium (five or six per group). Students hop over obstacles or from obstacle to obstacle; e.g., six small hoops placed close together.
- Repeat, but vary hopping combinations; e.g., RRLLRR.
- Repeat, stressing rhythmic hopping and inserting a step
  - RRLRRL and then LLRLLR.
    (listen to the sound of the footfall—listen for the same rhythm between steps)
- Play hopscotch or have the students create their own versions of hopscotch
- Stepping stones:
  - 15 or so hoops are set out like stepping stones in a river across an area the size of a basketball court. Set up more than one course if possible. The object is to travel from one side to the other without touching the ground (water). Students can hop, step or jump. Obstacles could also be used. Hoops may be rearranged during the activity for variety.

**Materials**

- hoops, low obstacles, benches/mats (optional)


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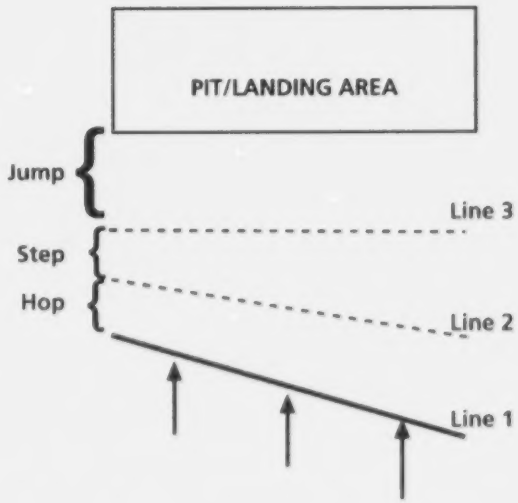
# TRIPLE JUMP - LEVEL 2

## Learning Activities

### STANDING TRIPLE JUMP PROGRESSION ON A GRID

- Review the following: a hop, (take off one foot, land on the same foot), step (take off one foot, land on the other foot [also called a bound]) and jump (take off one foot, land on both feet).
- Stand in line and hop across an area 10 to 20 metres in length.
- Race across area, hopping.
- Repeat with variations of hopping and stepping; e.g., hop, step, hop, step.
- Repeat with team activities (relays).
- Have the area marked as shown. An alternative would be to have lines of hoops set out—the students would hop, step and jump from hoop to hoop.
- Students gradually move along the take off line, finding their own personal level for the hop.
- Repeat, but this time add a step to the hop (hop from first to second line, step from second to third line). Make the hop and step rhythmic—drive up with thigh on the step stage.
- **Teaching note**: have the students hold the ankle of the non-hopping foot until the hop is landed, and release it for the step.

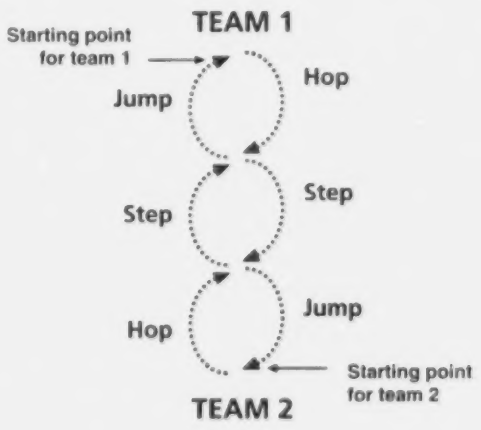



### STARTS WITH THE RIGHT, LEFT FOOT

- As above but using different legs to initiate the sequence to discover which feels more natural.

### STANDING TRIPLE JUMP COMPETITION

- Measure and record each individual's jumps—retry in future lessons.
- Team standing triple jump competition.
  - Team One's first jumper executes the triple jump from a line—preferably landing on grass.
  - Team Two's first jumper then triple jumps back, trying to get beyond the original starting point.
  - Team One's second jumper jumps from the point at which Team Two's first jumper landed.
  - Continue until everyone has jumped. If the second team's last jumper finished beyond the original starting point they win; if not the other team wins.




**Materials**

- hoops, measuring tape(s), long ropes or surveyor's tape, pylons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# TRIPLE JUMP - LEVEL 3

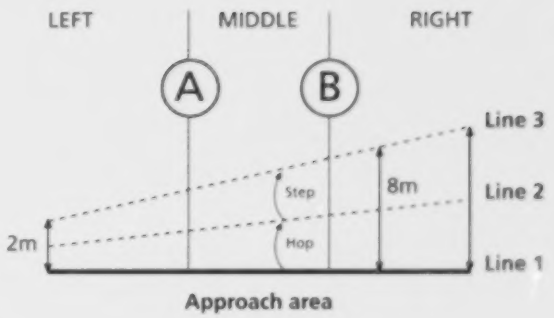
## Learning Activities

**SPECIFIC PREPARATION**

- Repeat various single leg hopping and rhythmic hopping drills similar to those recommended for Level 1.

**FIVE-STRIDE APPROACH AND HOP**

- **Set up**: On an open field create a grid (using ribbon, tape, paint, chalk, etc.) as in Level 2 (see ILLUSTRATION); Line #1 runs parallel to the square of the field, Line #3 runs from two metres away from Line #1 at the left end to 8 metres away at the right end, and Line #2 running half way between Lines #1 and #3. Insert two intersecting lines (A and B) through the grid in such a way that the grid is divided into three equal sectors (Left, Middle, Right).
- **Safety note**: Ensure that the portion of the field being used is free of stones or anything which could cause tripping, slipping or ankle twisting.
- **Activity**: Starting at the small end of the grid, have the students take a five-stride run at the grid, hop from Line #1 to Line #2 and walk back. This drill is repeated trying both left-to-left and right-to-right hops. Students then progress down the grid to greater distances until each finds a portion of the grid that is challenging, yet manageable.
  **Technical note**: In the Triple Jump, one must be able to carry some speed over the hop, so it is of little use for the students to choose a place on the grid where the distance is so challenging that the hop can just barely be achieved. Students must be able to hop for distance, yet still be able to step or run forward comfortably off the line.





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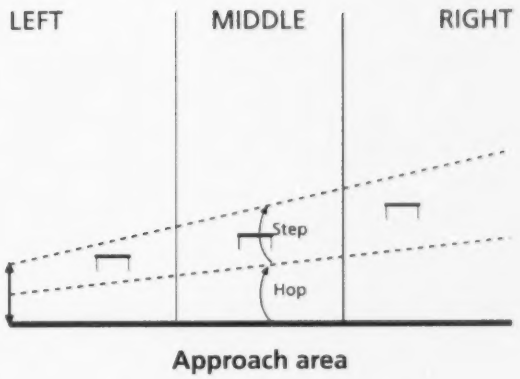
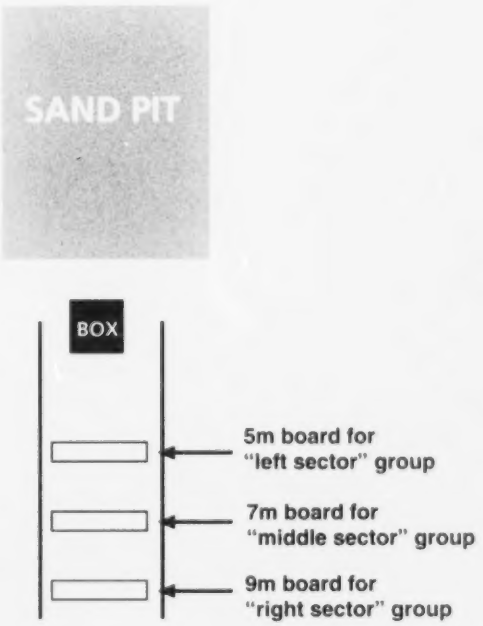
**HOP AND STEP FROM FIVE STRIDES**

- **Set up**: Still using the grid set up as above, place a 0.3-metre obstacle on the 'hop-to-step' gap in the grid.
- **Activity**: Now working at the same level of difficulty on the grid established above, each student takes a five-stride run at the grid and attempts to hop (from Line #1 to Line #2), step (from Line #2, over the obstacle, to Line #3) AND run off the grid for a few strides. Both ways should be attempted: RRL or LLR. Each student then decides which way is stronger. At the end of this activity, tell the students to take note of the grid sector in which each is working: Left, Middle or Right. Those working in the left sector will be called the "Left Sector Group", and so on for the remainder of the lesson.




**HOP, STEP AND JUMP FROM FIVE STRIDES**

- **Set up**: Move to the Triple Jump runway
- Set up a low, broad, sturdy box (or platform) at the final jump takeoff location close to the sand pit for a slightly elevated takeoff area. Mark three different initial takeoff zones using tape or chalk at the following distances from the edge of the pit: 5 metres for Left sector students, 7 metres for Middle sector students and 9 metres for Right sector students. Using chalk, the students help each other establish a five-stride approach run from the respective takeoff boards as shown in Long Jump, Level 3.
- **Activity**: With a five-stride approach, students Hop, Step and, then, Jump from the box, landing in the sand with both legs extended forward, feet together. The flight time provided by the elevated (box) take off allows the students to work on the "Sail" or "Hang" techniques, as well.
- **Safety note**: Ensure that the sand is well dug and continually raked.
  - Look for even distances covered on the hop and step phases (see Full Sequence ILLUSTRATION at end of Level 4). Also, remind the students to do the proper, five-stride approach rhythm to the takeoff board; e.g., 1..2..3..4, 5.




**Materials**

- shovel, rake, low sturdy box, chalk or cones, tape, low hurdle or obstacle, hazard ribbon

# TRIPLE JUMP - LEVEL 4

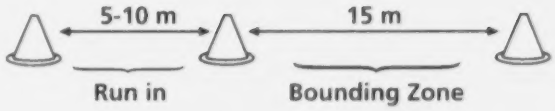
## Learning Activities

### SPECIFIC PREPARATION

- Repeat single leg hopping and rhythmic hopping drills similar to those recommended for Level 1.

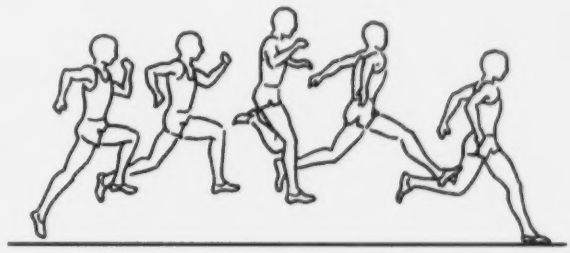
### BOUNDING FROM SHORT APPROACH

- **Set up**: Using cones, mark out a five to 10-metre sector followed by a 15-metre sector as illustrated.
- **Activity**: Students use the five- to 10-metre sector to run into and do 15 metres of 'high' bounding.
  The bounding action resembles the action of jumping from stone to stone across a river; e.g., R...L...R...L...R...L. Essentially, this drill amounts to continuous "step" phases of the Triple Jump at speed.




### HOPPING FROM SHORT APPROACH

- **Set up**: Same as above.
- **Safety note**: Ensure that the portion of the field being used is free of stones or anything which could cause tripping, slipping or ankle twisting.
- **Activity**: Continuous hopping from a short approach using the rhythms indicated.
  - **Technical note**: While airborne in the "hop" phase of Triple Jump, the take off leg cycles underneath the body in the following way: the take off foot comes off the ground, tucks up under the bum and moves out front to prepare for another jump off the same foot (like riding a bicycle with one leg). Students should try to achieve this "cycling" movement in all hopping activities below.
- Run in (five to 10 metres) and ...RRRRRRRRR (15 metres). Try cycling the right leg under the body and forward each time and try matching the rhythm of the hops with a double arm pump each time where both arms draw back while airborne and prepare to pump forward on each hop.
- Run in and ...LLLLLLLLL (15 metres)
- Run in and ...RRLRRLRRLRRL (15 metres)
- Look for cycling of the right leg on the R – R ("hop") parts and a bounding action on the R – L ("step") parts assisted by a double arm punch. Repeat with a left leg take off; LLRLLRLLRLLR.

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**HOP, STEP AND JUMP FROM BOX USING FIVE-STRIDE APPROACH**

- Repeat Hop, Step and Jump from five strides from Level 3 Triple Jump—including the designation of three different initial take off boards or marked-off areas.
- This time focus on arm action and body position during the hop, step and jump, and on landing efficiency:
  - At the hop takeoff, the arm drive is single and opposite; e.g., if the left knee drives forward, the right arm drives forward.
  - At the step takeoff, the arm drive is a double pump forward.
  - At the jump takeoff, the arm drive is single and opposite.
  - The upper body posture stays tall and centered throughout, not bending at the hips.
- For discussion on efficient landing, see Long Jump, Level 4, Sail technique and landing.

**HOP, STEP AND JUMP FROM FIVE-STRIDE APPROACH**

- **Set up**: Remove the box from the runway.
- **Activity**: Repeat as above, but without the assistance of a box. The flight technique—"Sail" or "Hang"—will be more difficult to achieve without the box. Students will need a strong jump phase in order to execute flight technique well on this drill.

**WHOLE SEQUENCE FROM A FULL APPROACH**

- **Set up**: Have students work in pairs to establish the full approach as discussed in Long Jump, Level 4.
- **Technical note**: Depending on degree of comfort with take off board distance from the pit while using five strides, students may have to decide on moving out to the next take off board when using a full approach; e.g., moving from the 5-metre board to the 7-metre board.
  **Technical note**: An 11-metre board will likely have to be added. Top-ranked men use a 13-metre board.
- **Activity**: It is now time to triple jump: Full approach, take off, 'hop', 'step', 'jump', flight ("Sail" or "Hang") and landing.

**Materials**

- shovel; rake; low, sturdy box; chalk or cones, tape

Triple Jump—Full Sequence


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# THROW

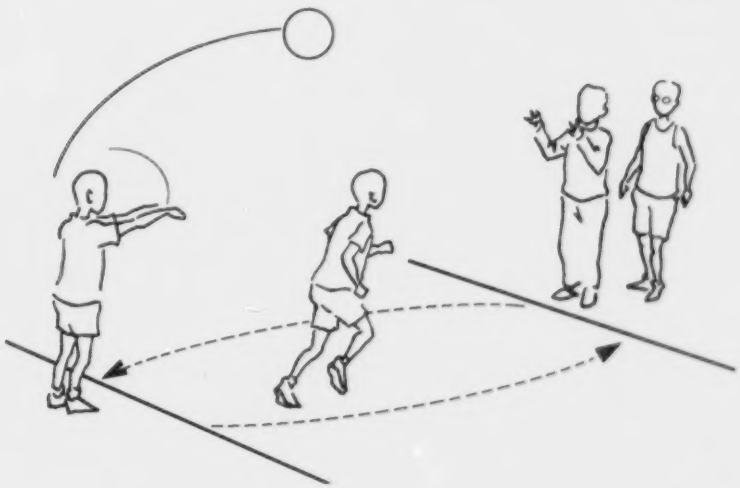
## Skill Progressions at a Glance

### General Criteria (for right-handed throws)

- Movement sequence: a. preparation; b. momentum building; c. delivery; and d. recovery.
- During the delivery, right heel and left toe align (the "Power Position").
- Larger, stronger muscles act before smaller, quicker muscles.
- Lower half of the body rotates ahead of the top half; e.g., right hip moves ahead before right shoulder.
- Transfer of weight from the right foot to the left foot; e.g., body facing side-on to direction of throw with left foot ahead.
- Extension and "blocking" of the left side at the moment of delivery.
- On recovery, throwing arm follows through.

### Safety for the Throws

- look before you throw
- all throw, all retrieve
- left handers to the left end of the group
- At Levels 3 and 4 see safety guidelines (pp. 6–7)

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## Throwing Skills Criteria and Progressions at a Glance

| | **Shot Put (glide technique)** | **Discus** | **Javelin** |
|---|---|---|---|
| | • Maintain balance while gliding backward<br>• Centre of gravity stays low throughout glide<br>• Maintain mid-body firmness throughout<br>• Shoulders stay back as legs start to push<br>• Strong, explosive push of the legs<br>• Push shot from neck/shoulder not lower | • Remain centred/balanced through turns<br>• Weight on ball of right foot at Power Position<br>• Throwing arm pulls on discus once shoulders align with hips<br>• Discus leaves hand off index finger | • Throwing arm and shoulder extend back<br>• Javelin sits along length of hand; palm is up<br>• Hand holds javelin above shoulder level<br>• Legs used to gain forward momentum<br>• At moment of throw, as body turns to face forward, arm rotates, elbow is high above shoulder |
| **Level 1** | • Heave objects from between legs forward and backward over head or shoulder<br>• Chest pass objects from various positions; prone, seated, kneeling, standing, with twist, legs parallel and one leg ahead<br>• Two-foot backward hops<br>p. 62 | • Sidearm flings while facing forward using rings, cones, weighted bags<br>• Positions: sitting, knee stand, standing with feet parallel, standing with one foot ahead of the other; trying right then left<br>p. 69 | • Overhead "soccer" throws with a large ball<br>• Positions: sitting, knee stand, standing with feet parallel, standing with one foot ahead of the other; trying right then left<br>• Sideways running, shuffling, galloping; trying right then left<br>• Overhand throws; trying right then left with a small ball<br>p. 78 |
| **Level 2** | • Chest pass weighted object for distance<br>• Single foot backward hops, with and without weighted object held at neck level<br>• Two-step backward shuffle and pass; trying right then left<br>• Single foot backward hop and pass; trying right then left<br>p. 63 | • Sidearm flings from standing side throw at a target and for distance using rings, cones, weighted bags<br>• Follow through and recovery<br>• One-turn and fling and recovery<br>p. 71 | • Forward running to galloping sideways (without/with object balanced on open hand – palm up); trying right then left<br>• One "side-gallop" and throw overhand at target or for distance with ball or cone<br>• Two "side-gallops" and throw overhand with follow through and recovery<br>p. 80 |
| **Level 3** | • Introduce shot put and grip<br>• Standing frontal put; arm only<br>• Standing frontal put using legs<br>• Standing side put<br>• Put from power position plus recovery<br>p. 64 | • Introduce discus (light weight) and grip<br>• Bowl the discus; Flip-toss the discus<br>• Standing front throw with discus or rings<br>• Standing side throw with discus<br>p. 73 | • Introduce javelin (blunt stick) and grip(s)<br>• Frontal throws through hoops or at target<br>• Standing throw starting with one foot head of the other using stick<br>• Three-stride rhythm and throw plus recovery using ball or cone; graduate to stick<br>p. 82 |
| **Level 4** | • Two-foot backward hop, land with shoulders back and feet turned to side<br>• One-foot backward hop/glide, land with shoulders back and feet turned to side<br>• Glide to power position<br>• Glide to power position and put shot, plus recovery<br>p. 67 | • Throw from power position plus recovery<br>• One-turn movement to power position (no throw)<br>• One-turn movement to power position, throw and recovery<br>• 1.5 turns to power position (no throw)<br>• Whole sequence, including recovery<br>• Practice whole sequence until smooth and controlled<br>p. 76 | • Introduce "real" javelin and safety rules<br>• Repeat Level 3 drills until smooth flight of javelin<br>• Five-stride rhythm (no throw) practicing withdrawal on steps one and two<br>• Five-stride rhythm and throw<br>• Walk into five-stride rhythm and throw<br>• Run into five-stride rhythm and throw<br>p. 85 |


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# SHOT PUT - LEVEL 1

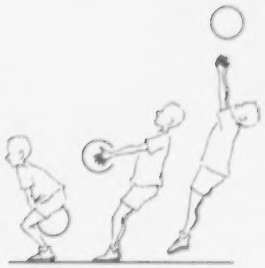
## Learning Activities

### TWO-FOOT BACKWARD HOPS

- In addition to the warm-up, the students move by hopping backward, feet together.

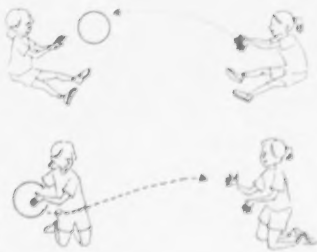
### HEAVE OBJECTS FROM BETWEEN THE LEGS

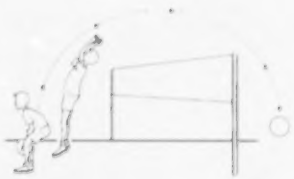
- Students face out from a circle in the gymnasium or field and throw forward starting the ball from between the legs.
- The students face in from a circle in the gymnasium or field and throw over the head or shoulder starting the ball from between the legs.
  - Look for the students to bend at the knee and use the thigh muscles.
  - Look for adequate spacing of the students during throwing activities.
  - Students retrieve their own objects.
- Two foot backward hop (staying low) and heave overhead backward.



### CHEST PASS OBJECTS FROM VARIOUS POSITIONS

- Students work in partners and pass back and forth from the following positions:
  - Prone (lying on stomach)
  - Seated
  - Kneeling
  - Standing
  - With a twist, legs parallel
  - One leg ahead
- Students throw over a low net or barrier to a partner using the above throwing positions.
- Student relays using one or more positions as a focus:
  - Under/over relays where ball is passed backward overhead and between the legs.
  - Circle relays utilizing twisting and turning.





**Materials**

- utility or rhino skin balls, volleyball or badminton net(s)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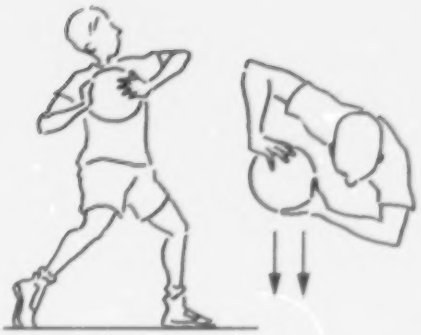
# SHOT PUT - LEVEL 2

## Learning Activities

**CHEST PASS A WEIGHTED OBJECT (FOR DISTANCE)**

- Students face the same direction and are evenly spaced. Group them if necessary as in standing put Level 3.
- Have the students throw for distance and place a marker at the landing spot.
- Same as above, but the students measure their own throws.
  - Train the students to look before they throw, have ALL throw THEN retrieve (useful to use commands), and maintain a landing area clear of people.

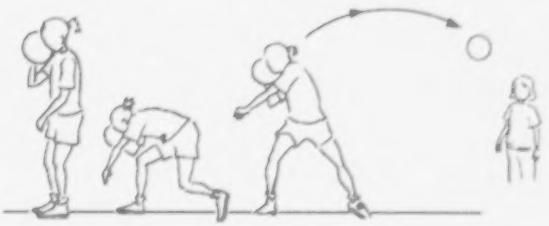


**SINGLE FOOT BACKWARD HOPS:**

- Without a weighted object.
  - With a group or partner, the students run out to a line or spot two or three metres away and hop back on one foot; on the second trip they use the opposite foot to hop on.
- With a weighted object; e.g., medicine ball
  - Same activity as above, but the students are to carry an object at neck level.

**TWO-STEP BACKWARD SHUFFLE AND PASS**

- Have the students work in pairs, passing the object between them at an appropriate distance.
- Students hold the object at neck level, and start with their backs to their partners.
- Before they throw, they shuffle back starting with the right, then left, turning to the left as they throw.



**SINGLE FOOT BACKWARD HOP AND PASS (LEGS CHANGE QUICKLY AFTER RELEASE)**

- Same partner drill as above, but the students take one hop backward, then turn and pass.

**Materials**

- large utility balls, basketballs or medicine balls, place markers and measuring tapes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# SHOT PUT - LEVEL 3

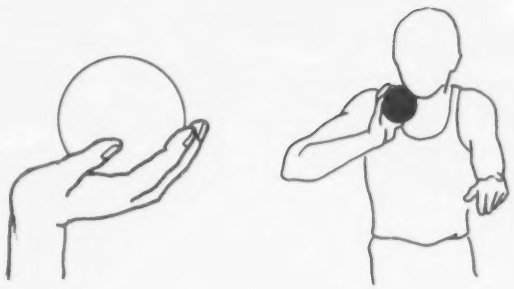
## Learning Activities

### SPECIFIC PREPARATION

- Repeat the various activities prescribed for Levels 1 and 2.

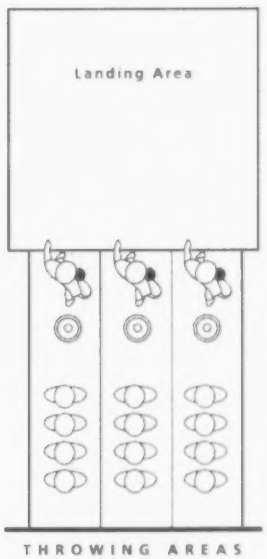
### INTRODUCE SHOT PUT, SAFETY MEASURES AND GRIP

- **Activity**:
  - Assemble the students. Show them a light-weight shot put and describe the grip.
  - Shot put rests at the base of the fingers.
  - Fingers are parallel and slightly spread.
  - Shot is placed at the front part of the neck, with the thumb on the collarbone.
  - Elbow points out to the side.
- Explain safety rules:
  - Never throw the shot put until the teacher's signal.
  - All students are to stand well back from the throwing line while waiting for a turn.
  - Each student looks BEFORE throwing to make sure there is nobody in the landing area or in the probable line of flight of the shot put.
  - After throwing, wait until EVERYONE has thrown or until instructed by the teacher to collect the shot put.



### STANDING FRONTAL PUTS

- **Set up**: Along a straight edge of a shot put landing area (i.e., an area where holes and divots don't matter) identify with cones the same number of throwing stations as there are shot puts. Distribute the students evenly among the stations, with left-handed students at the far left station.





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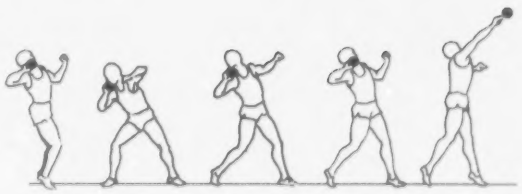
- **Activity:**
  - Have one student at each station pick up the shot put, assume the grip as described above and stand facing the direction of the throw with feet shoulder-width apart. [**Safety note**: Ask that all other students at each station stand back.] On "go" (or some other signal) the shot is PUSHED out directly from the neck using the arm only, keeping the elbow high. After all the shot puts have landed, the teacher now says, "Retrieve!" and the shots are brought back to the next in line.
  - Repeat the same general movement as above, but twist the shoulders to the side and bend the knees. On "go," stand up fast, unwind and throw as before, by pushing the shot put from the neck.

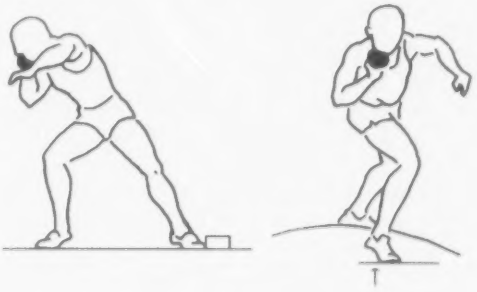
**PUT FROM A STEP**

- **Set up**: Same as above, including the same format for group organization and management.
- **Activity**: Begin as above, but now take one step forward, turning the hip and shoulder against the direction of throw continue with an immediate twisting extension of legs and hips and THROW!



**INTRODUCE POWER POSITION**

- **Set up**: Draw a chalk line down the middle of each throwing station perpendicular to the direction of throw.
- **Activity**: Assemble the students at one of the stations and discuss the fundamental importance of the power position: (1) it puts the body in an optimal position to exert maximal force against the shot put; (2) it is the link between the movement phase (the glide – to be learned later) and the throw. Demonstrate what the power position looks like:
  - Feet about 1½ times shoulder width apart with front toe and back heel in line. Line up feet along the chalk line.
  - Hips to the side, shoulders facing away from the direction of throw.
  - Weight on ball of rear foot.
- **Technical note**: Viewed from the side, the chin, knee and toe will be in vertical alignment.
- Now, let the students go to their respective stations, each one practicing just standing in the power position.

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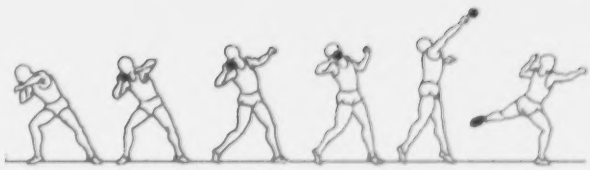
## PUT FROM POWER POSITION AND RECOVERY

- **Activity**: Assemble the students and demonstrate a throw from the power position, including a brief emphasis on the recovery step after the throw:
  - Rear leg initiates the movement by pushing explosively against the ground causing the hips to rise and rotate to face the front.
  - Body weight is transferred from the right leg to the left.
  - Front leg is extended and braced, causing the body to lift further.
  - Throwing arm pushes the shot put up and out just as legs reach full extension.
  - Legs change quickly **after the throw** and body is lowered to avoid stepping over the line into the throwing area.
- Students practice the throw from the power position, including the recovery.



**Materials**

- light shot puts, chalk, cones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# SHOT PUT - LEVEL 4

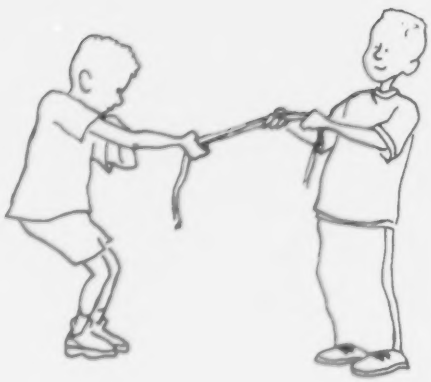
## Learning Activities

### SPECIFIC PREPARATION

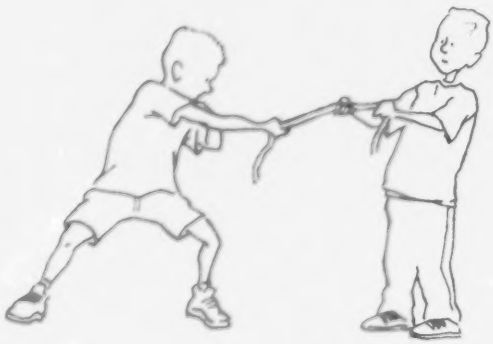
- Review safety measures, standing frontal puts, puts from a step, put from power position and recovery from Level 3 Shot Put.

### BACKWARD HOP TO GLIDE PROGRESSION

- **Set up**: Students work in pairs. Each pair takes a bunji cord or rope and finds space along a lane line on the track. Partners stand on the line facing each other, holding the cord between them as if to commence a tug-of war. One partner holds the cord steady, while the other partner does the activities described below. Each partner takes a turn being the "active" partner.
- **Activity**:
  - Two foot backward hop into the power position—With the non-throwing hand grasping the cord at arm's length and the throwing hand pretending to hold a shot to the neck or just resting on the shoulder, the active partner bends both knees, hops backward with both feet and lands in the power position. The shoulders and head continue to face the partner, non-throwing arm still grasping the cord at arm's length, but the lower body has turned sideways. Feet should be in proper (front toe, back heel) alignment on the lane line. Weight should be on the ball of the back foot. This drill is repeated until the active partners can land accurately in the power position without looking at their feet, continuing to face their partner throughout the movement
  - One foot backward hop into the power position—The active partner stands with one foot (right foot for right-handed throwers; left foot for left-handed throwers) on the lane line and, grasping bunji cord as before, does a one-foot backward hop and lands with both feet in the power position.



Direction of movement

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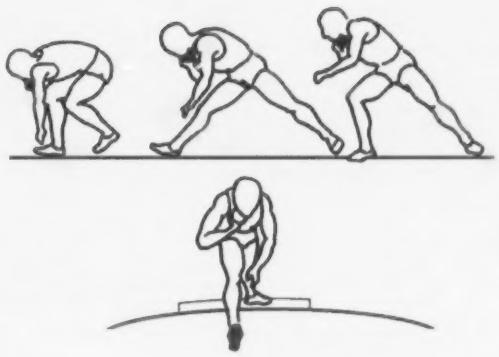
**ONE FOOT BACKWARD GLIDES**

- Same general action as above, but the active partner attempts to lengthen the backward distance traveled to the power position by bending low on the support leg, tipping body weight back and driving the non-support leg backward actively. The foot of the support leg skims lightly along the ground and is pulled under the body to land on the ball of the foot just before (or at the same time as) the non-support leg touches the ground.

**GLIDE TO POWER POSITION**

- **Set up**: Students return to throwing stations.
- **Activity**: Each student now practices gliding backward to the power position along the chalk line that divides the stations as in Level 3 while holding the shot put properly at the neck. This drill should continue until the students can land accurately and well balanced in the power position without looking at their feet. The shoulders stay facing away from direction of the throw throughout the glide.

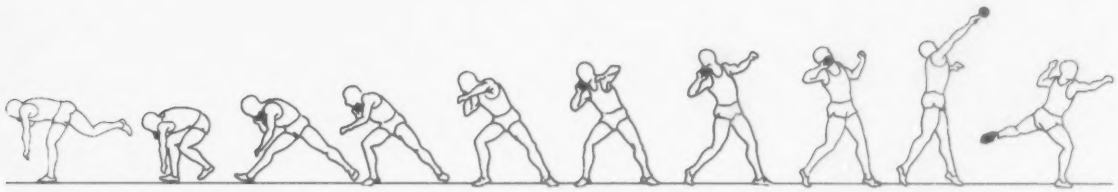


**WHOLE SEQUENCE**

- Have the students do the entire sequence: Start facing the opposite direction of the throw, bend the knees with the weight on one foot, fall back and drive the non-support leg, land in the power position with both feet, throw from the power position and do the recovery step.

**Materials**

- light shot puts, chalk, cones, short bunji cord or rope



Shot Put—Full Sequence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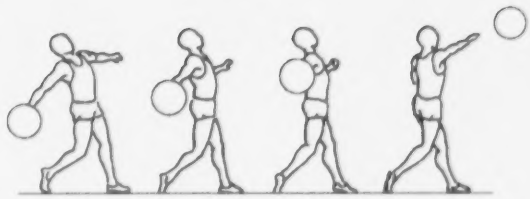
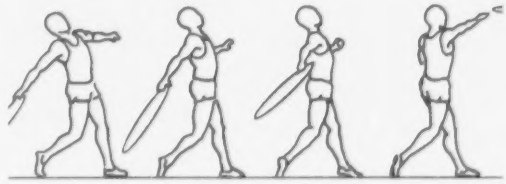
# DISCUS - LEVEL 1

## Learning Activities

### SIDEARM FLINGS WHILE FACING FORWARD

- rings, cones, weighted bags, etc.
  - Movement should be extended from the shoulder with the palm facing down.
  - Encourage the students to remain "tall" while throwing.
  - The throw is led with the hip; pull the arm around.
  - Exercise with lighter implements to create speed with five to 10 repetitions over two to four sets.
  - Exercise with heavier implements to create strength with five to 30 repetitions over three to five sets.
  - Sidearm throws can be done for accuracy and/or distance at this level.





### FLINGS FROM VARIOUS POSITIONS

- Positions: sitting, knee stand, standing with feet parallel, standing one foot ahead of the other (trying right and left sides of the body)
  - Students will isolate the movement of the arm and realize the role the legs play in providing distance to the throw.
  - Include discussion about the weight shifting forward.
  - Add a one step approach.

### GAMES

- "Hoops Over the Ball" (or "Flag")—Set a medicine ball on top of a vault box or set up a broom ball stick into a large pylon to create a flag. The students form a circle around the box or flag and throw hoops, trying to ring the ball or stick. Teams can compete by facing the box or flag and trying to get more rings than the others using different coloured implements or separate targets.
- "Cardboard Box Barrage"—the students throw implements at a row of cardboard boxes mounted on benches or vault boxes. A round is finished when one team has knocked down its boxes or when the teams have thrown all their implements.

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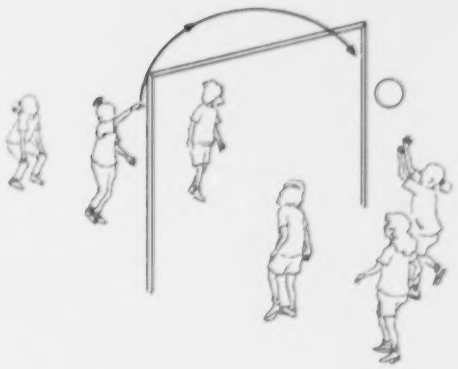
- "Over the Net"—using either utility balls or rings, the goal is to sidearm toss the implement over the net and have it land on the floor. The opposing team tries to catch it before it lands and then sidearm tosses it back.



**Materials**

- hoops, cones, weighted bags, sticks, rings, heavy balls, vault boxes, benches, cardboard boxes, pylons, badminton or volleyball net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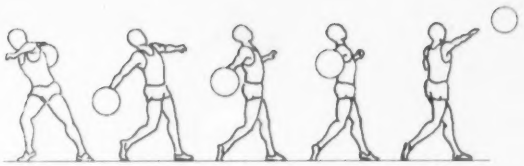
# DISCUS - LEVEL 2

## Learning Activities

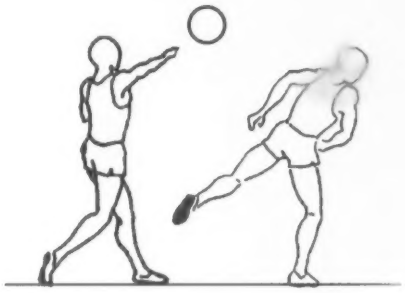
**SIDEARM FLINGS STARTING FROM SIDE-ON STANCE (TARGET, DISTANCE)**

- Light medicine balls, weighted bags, basketballs, hoops, rubber boots—body is side-on to direction of throw, feet are 1 ½ shoulder-widths apart.
- Swing the object backward, pivoting on the right foot, turn the right heel out while pushing the right hip forward.
- The same games from Level 1 will work to develop the students' power positions. Place the targets farther away. Note the differences in distance achieved.
- Keep the throwing implement as far away from the body as possible.



**FOLLOW-THROUGH AND RECOVERY**

- Balance is important—stay tall.
- Footwork—called a "reverse"—switch the foot placement by bringing the right foot ahead of the left foot.
- Emphasize the slinging motion of the arm as the throwing implement is being released and the continuation of the rotating movement once the throwing implement has left the hand.



**ONE-TURN AND FLING AND RECOVERY**

- Students stand with both feet straddling a line on the gymnasium floor, facing the direction of the throw.
- Students step forward with the same foot as the throwing arm (e.g., right-handed throwers step forward with the right foot), stepping onto the line with the ball of the foot.
- Keeping the weight on the ball of that foot, pivot 180 degrees, bringing the other leg around behind the body until it sets down 1½ shoulder widths distance farther down the line.
- Shoulders now turn slightly and the students should find themselves exactly in the position of a standing side throw ready to just finish the turn and throw.

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- Throwing arm remains back, trailing behind the body during the turn.
- Practice until the students are comfortable with the one-turn action.
- Add an implement like a heavy ball or pylon to fling and do the above turn, plus release and recovery.
- Using the games from Level 1, include a single turn, fling and recovery as part of the game.
- Using pylons for practice focuses the attention onto the turning actions of the body because distance is not a factor.

**Materials**

- hoops, traffic cones, weighted bags, rings, heavy balls, vault boxes, benches, cardboard boxes, pylons, badminton or volleyball net


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# DISCUS - LEVEL 3

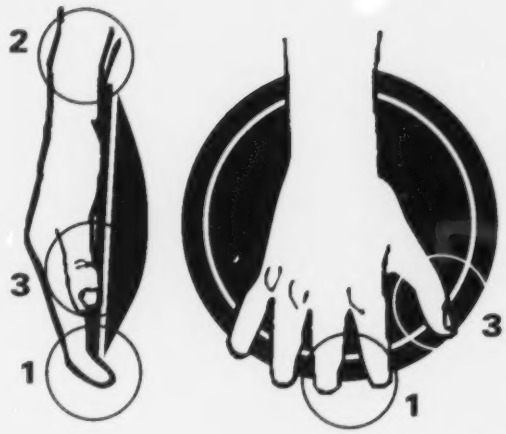
## Learning Activities

### SPECIFIC PREPARATION

- Repeat various activities prescribed for Levels 1 and 2.

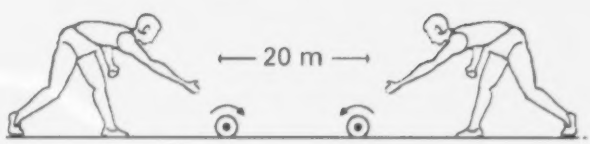
### INTRODUCE DISCUS, SAFETY MEASURES AND GRIP

- **Activity**: Assemble the students. Show them a light-weight discus and describe the grip as in illustration.
  - Discus is held in the last joints of the fingers and rests against the palm of the hand as in 1.
  - Wrist is relaxed and straight as in 2.
  - Fingers are spread over the rim of the discus and the thumb rests on the discus (no gripping with thumb) as in 3.
- Explain safety rules:
  - Never throw the discus until the teacher's signal.
  - All students are to stand well back from the throwing line while waiting for a turn.
  - Each student looks BEFORE throwing to make sure there is nobody in the landing area or in the probable line of flight of the discus.
  - After throwing, wait until ALL have thrown or until instructed by the teacher to collect the discus. ("All throw; All retrieve")




### BOWLING THE DISCUS

- **Set up**: Students work in pairs, one discus for each pair. Find two lines on the field that are approximately 10 to 20 metres apart; e.g. 10 yard football lines. Have the students spread out along the two lines with partners, facing each other.
- **Activity**: Partners roll the discus on its edge back and forth to each other. The term 'bowling' implies that the students must bend their knees and release the discus right at ground level. The best way to make it run with a spin is to release the discus off the index finger. It must be released with enough speed to roll straight at the other person. Look for the students to progress to a full back swing of the arm before the release.





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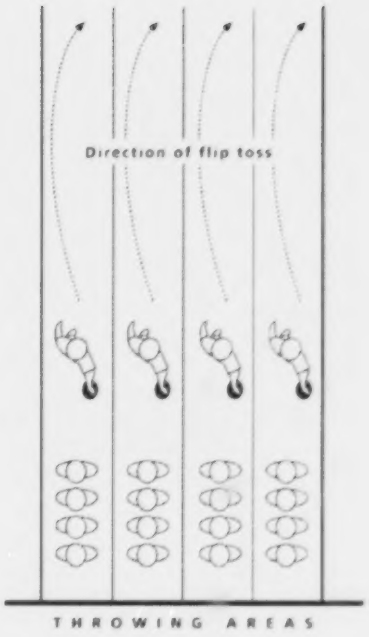
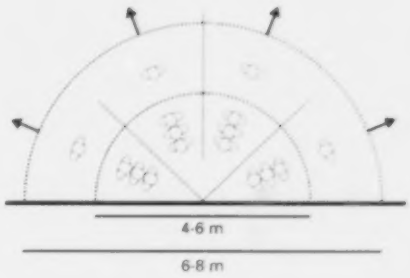
## FLIP-TOSSING THE DISCUS

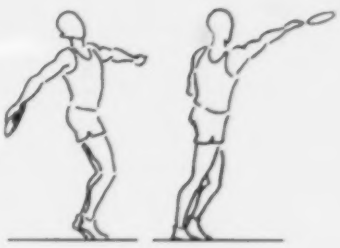
- **Set up**: Now the students spread out along the football side line at one edge of the field, with each pair occupying a 10-yard zone. When one partner throws, the other stands well back. Partners take turns throwing from the same spot.
  **Safety note: From this point onward, the students must wait for teacher to say "ALL THROW" and "ALL RETRIEVE" before doing either move.**
- **Activity**: Using the same index finger release as in the bowling exercise, the thrower now stands upright, bends the knees slightly while the throwing arm is in a slight back swing and then straightens and tosses the discus up and forward. With a proper release the discus will spin in the air in vertical orientation and land on its edge about 10 to 20m directly in front of the thrower.
  **Caution: Make sure that the discus is not thrown directly up in the air where it can come down on the thrower's head.**

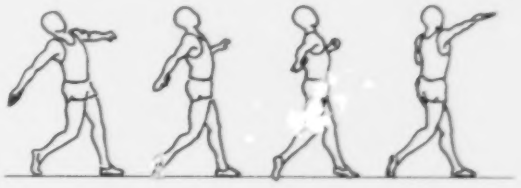



## STANDING FRONT THROW

- **Set up**: Create throwing stations either in a line formation with plenty of space between each or in a semi-circle as shown. Identify with cones the same number of throwing stations as there are discs; e.g., 6 discs = 6 stations. Put one ringette ring at each station, too. Distribute the students evenly among the stations, with left-handers at the far left station.
- **Activity**:
  - One student at each station grasps a ringette ring lightly, stands facing the direction of throw, feet parallel and about shoulder-width apart. The student twists back and then—using the legs for power—unwinds and flings the ring to some target straight ahead in the field.
    **Safety note**: Ask that all other students at each station stand back.
  - Repeat the same general movement, but standing with one foot ahead of the other, both toes pointing in the direction of throw. The foot opposite to the throwing arm is the one in front.
  - Repeat now with the discus in hand, with enough back swing and lateral forward swing of the arm to keep the discus flat at release. Look for the discus to leave the hand spinning off the index finger; not the pinky.



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**STANDING SIDE THROW**

- **Activity**: Still working at stations, students now stand side-on to the direction of the throw, the feet 1½ shoulder-widths apart and the throwing side back. With a slight, relaxed backward swing of the discus, students pivot on the back foot, push the hip forward while blocking with the front leg and release the discus directly ahead.
- Students take turns practicing until the action is smooth and the discus flight is smooth (not wobbling) and flat and being released off the index finger in the intended direction of the throw.

**Materials**

- light discus, chalk, cones, ringette rings or quoits

# DISCUS - LEVEL 4

## Learning Activities

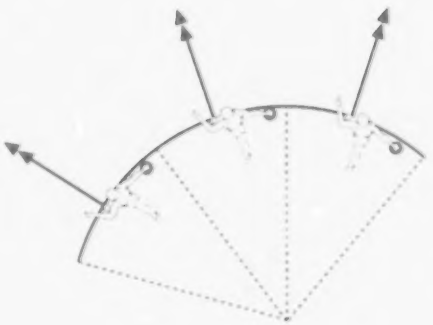
### SPECIFIC PREPARATION

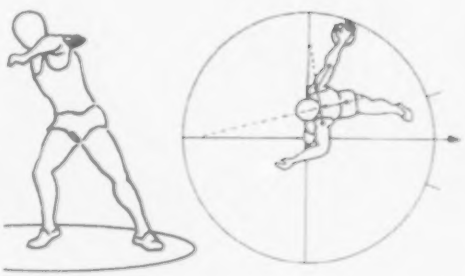
- Review Level 3 progression including safety measure and grip.

### INTRODUCE POWER POSITION

- **Set up**: Draw a line with tape or chalk down the middle of each throwing station perpendicular to the direction of the throw.
- **Activity**: Assemble the students and review the importance of the power position as discussed in Shot Put, Level 3. Demonstrate what the power position looks like:
  - Feet about 1½ shoulder widths apart with the front leg extended, the toe slightly off the centre line and the ball of the back foot on the centre line.
  - Hips to the side, shoulders facing away from the direction of throw.
  - Weight on the ball of the rear foot, with the rear leg bent and ready to exert force.
  - Throwing arm is extended back at shoulder level.

    **Technical note**: Viewed from the side, the chin, knee and toe will be in vertical alignment.
- Now the students go to their respective stations, each one practicing just standing in the power position.





### STANDING THROW FROM POWER POSITION

- **Activity**: Assemble the students once again and demonstrate a throw from the power position:
  - Face sideways with the feet in the power position.
  - Swing the discus back and sink and twist into the power position.
  - Initiate the throw with a vigorous action of the throwing-side hip (right hip for right-handed throwers; left hip for left-handed throwers) turning to the front.
  - The whole movement must be performed continuously at speed or else the discus will drop from the hand.

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- Students return to their stations, taking turns practicing the throw from the power position. **Safety note: From this point onward, the students must wait for teacher to say "ALL THROW" and "ALL RETRIEVE" before doing either move.**

**ONE TURN THROW (RIGHT-HANDED THROWS)**

- **Activity**: One turn to the power position (without discus):
  - Students stand facing the direction of throw, with the left foot forward and slightly to the right of the centre line drawn through each station
  - Take a strong step forward, the ball of the right foot touching down on the centre line and the right toe pointing slightly to the left.
  - Pivot counter-clockwise on the ball of the right foot, bringing the left foot around to its proper place in the power position. Throughout this last move the shoulders and upper body must stop turning when they reach the point in the pivot where they face away from the direction of the throw.

- **Activity**: One turn to the power position, throw and recovery:
  - Once the students execute the above turn smoothly, allow them to take the discus in hand (or ringette rings) and practice one turn, throw and recovery **– ONE STATION AT A TIME!**

**WHOLE SEQUENCE (RIGHT-HANDED THROWS)**

- **Activity**:
  - Perform the standard/full discus turn to the power position (light implement in hand; no throw). (See full sequence illustration.)
  - Perform the whole sequence with the light discus in hand—start by facing the opposite direction of the throw, bend the knees with the weight on both feet, back swing, full turn, power position, throw and recovery—**ONE STATION AT A TIME!**

**Materials**

- light discus, chalk or tape, cones, ringette rings or quoits

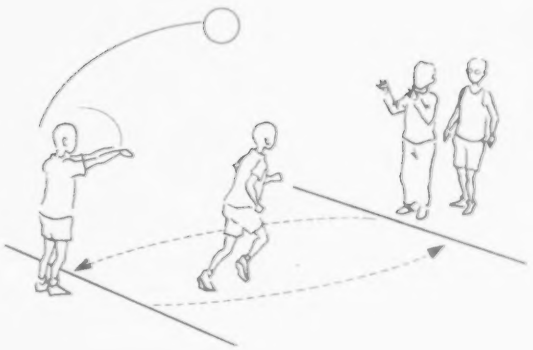
Discus Throw—Full Sequence

# JAVELIN - LEVEL 1

## Learning Activities

**OVERHEAD "SOCCER" THROWS (LARGE BALL)**

- Both hands are on the ball and it is thrown from overhead with both feet on the ground. Note the whipping action created. Limit to five to 10 repetitions.
- Students can pass to one another or play "keep away" from a third student using a lighter ball.
- Add a three-stride rhythmic approach.
- Throw against the wall, toward a target or over a net.
- Play "Follow the Ball"—pairs stand three to five metres apart and each student starts by passing the ball to the first student in the line across. After passing, the student then runs to the other side, following the direction of the pass.



**THROWS FROM VARIOUS POSITIONS**

- Positions: sitting, knee stand, standing with feet parallel, standing with one foot ahead of the other (right, then left)
  - Give the students the opportunity to attempt two-handed overhead throws from each position and with one foot forward and then the other.
  - Through experimentation and discussion, the students will discover the importance of the legs in throwing.

**SIDEWAYS RUNNING, SHUFFLING, GALLOPING (RIGHT, THEN LEFT)**

- These activities build the muscles needed to perform the crossover steps during the momentum-building phase of the throw.
- Sideways running involves continuous crossovers, while shuffling does not, and galloping involves a change in rhythm.
- It is important to do all sideways activities on both sides.
- Relays with teams of four or five down the length of the gymnasium work well for these sideways movements. Emphasize the need to practice these movements facing either direction.

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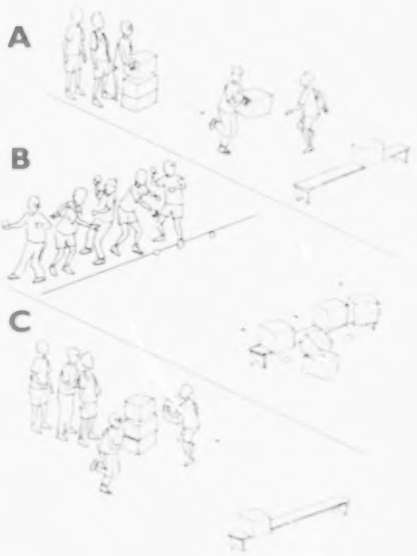
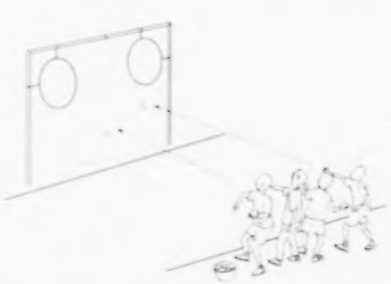
## OVERHAND THROWS (SMALL BALL)

- It is important to throw using one hand and then the other to develop strength and speed in the muscle groups on both sides of the body.
- Students start from a standing position, add the three-step rhythm—repeat each five to 10 times.

## GAMES

- "Throwing and Sprinting"—the students sprint with boxes to set up the targets, then return to the throwing line. Using large balls, the students throw overhand toward the targets. After all the targets are knocked down, they sprint to collect the boxes. Teams can compete against one another.
- "Hit the Target"—suspend a tether ball from a soccer crossbar, football standard or basketball hoop. Have someone on each side of the standard assist in swinging the ball from side to side. Hoops could also be suspended from a rope or hung in the corners of the standards. Using small balls, attempt to hit the moving target.





**Materials**

- large, heavy balls appropriate to the age and strength of the students—provide a choice; small balls, rings, beanbags or rubber chickens, small blocks, boxes, bowling pins, tetherball, hoops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# JAVELIN - LEVEL 2

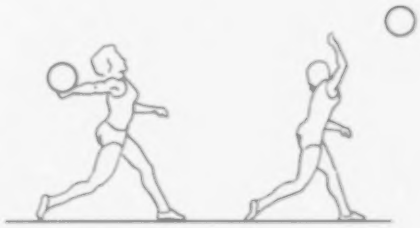
## Learning Activities

### FORWARD RUNNING TO GALLOPING SIDEWAYS

- Students run forward across the gymnasium.
- Students skip across the gymnasium.
- Continue using different ways of moving across the gymnasium; e.g., galloping, hopping, leaping.
- Students gallop forward across the gymnasium.
- Students gallop sideways across the gymnasium.
- Students gallop sideways with the throwing arm held high, palm up.
- Students run under control to the middle of the gymnasium and then run sideways across the remainder of the gymnasium.
- Students use cross over step across gymnasium—use other foot as lead foot to return across gymnasium.

### ONE SIDE GALLOP AND OVERHAND THROW (AT TARGET OR FOR DISTANCE)

- Have the students throw (overhand) soft sponge balls or beanbags at the wall.
- Throw hard and throw for accuracy.
- Review overhand throwing skills (stand side-on to a target, the lead foot pointed at the target, the arm extended back, palm up. Then transfer the weight from the back foot to the front foot, using the leg muscles as well as the arms, follow through, throwing overhand, not sidearm).
- With a partner, throw soft sponge balls back and forth. After five successive throws/catches, one partner takes a large step backward and the count to five begins again. Partners see how far they can get while still throwing and catching successfully.
- Individually—take one cross-step and throw the balls at the wall.
- Repeat a number of times. Check for good throwing position after the cross-step.



### TWO "CROSS-STEPS" AND THROW OVERHAND WITH FOLLOW-THROUGH AND RECOVERY

- As above, but take two "cross-steps" (cross-steps) before throwing.
- "Clear out"—two teams, one in each half of the gymnasium—the object is to try to empty their half of the gymnasium of balls by throwing them overhand into the other half. Play for about two minutes—count balls on each side of the gymnasium—the side with the fewest balls is the winner. Repeat. Insist on two "cross over steps" before throwing.

Clear out.

TEAM 1

TEAM 2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- Throw for distance—measure and record the distance (indoors with soft sponge balls, outside with softballs). If the students can throw all the way across the gymnasium, have them throw from a line and measure how high up on the far wall the throw contacts the wall.

**Materials**
- soft sponge balls (five-inch), beanbags, tape measure

# JAVELIN - LEVEL 3

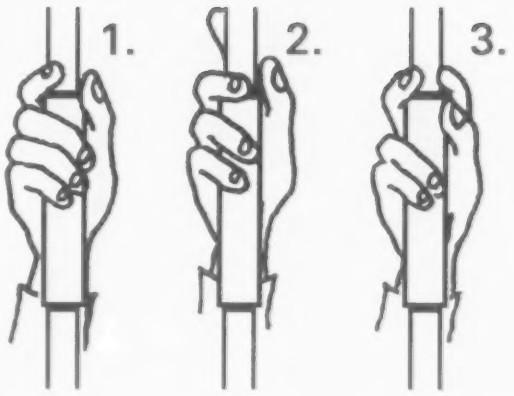
## Learning Activities

### SPECIFIC PREPARATION

- Repeat the various activities prescribed for Levels 1 and 2.

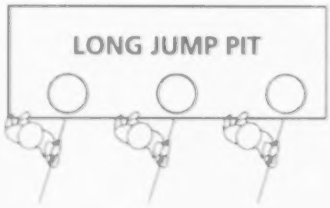
### INTRODUCE JAVELIN (BLUNT STICK), SAFETY MEASURES AND GRIP

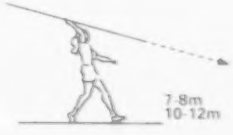
- **Activity**: Assemble the students. Show them a blunt stick they will use in place of the javelin and describe different ways of gripping the javelin. Decide on one grip for all the students to use in the lesson:
  - Thumb and index finger as in 1
  - Thumb and second finger as in 2
  - "Split finger" as in 3
- Explain safety rules:
  - Only throw the javelin on the teacher's signal; e.g., "All throw".
  - All the students are to stand well back from the throwing line while waiting for a turn.
  - Each student looks BEFORE throwing to make sure there is nobody in the landing area or in the probable line of flight.
  - After throwing, wait until ALL have thrown or until instructed by the teacher to collect the javelin. ("All throw; All retrieve")




### STANDING FRONTAL THROWS

- **Set up**: Create three to four stations along the side of a very soft sand (long jump) pit about three metres away from the pit; one stick per station; one hoop in the middle of the pit in line with each station.
- **Activity**: Have the students stand facing forward with one foot ahead of the other and both feet pointing forward. Studer hold the stick with the correct grip—palm up d high above the throwing shoulder, elbow in line with the stick, the stick pointing at the hoop in the sand and the opposite foot forward. They attempt to drive the blunt end of the stick down so that it sticks into the sand within the target area (hoop).
  - Similar to above, but now the stations are moved 10 to 15 metres away from edge of the sand pit and the students must now lean back and try to release the stick at an angle that allows a smooth, linear flight toward the targets in the sand.







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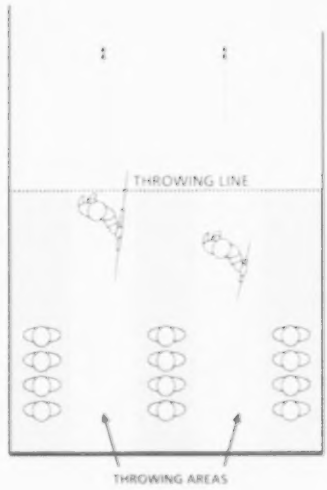
- **Safety note: From this point onward, the students must wait for the teacher to say "ALL THROW" and "ALL RETRIEVE" before doing either move.**

**STANDING SIDE THROWS (RIGHT-HANDED THROWERS)**

- **Set up**: Students spread out along the football sideline at one edge of a field, with each pair occupying a 10-yard zone (or zones identified with cones). There should be as many stations as there are sticks available to throw—one stick per station. When one partner throws, the other stands well back. Partners take turns throwing from the same spot. Distribute the students evenly among the stations, with left-handers at the far left station.
- **Activity**: Students take turns throwing the stick as follows:
  - Body Position
    - Head faces the front, while the hips and shoulders face the side.
    - Left foot is about one metre ahead of the right foot; both feet pointing almost straight ahead.
    - Weight is on the right leg.
    - Stick is 'withdrawn' (the right arm extends all the way back) with the palm of the right hand facing the sky and above the level of the shoulder. The tip of the stick should be at the level of the right eye.
  - Throwing Action
    - Lift left leg slightly off ground, then drive the right leg hard, pivoting on the ball of the foot and brace the left foot against the ground, heel first.
    - The hips will rotate to the front, forming a bowed back.
    - As the arm begins the flinging action, the right elbow bends, lifts and points immediately in the direction of the throw on its way to releasing the stick.
  - During the entire throwing action the elbow should be kept as close to the stick as possible.
  - Aim to keep the flight of the stick smooth and linear.



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**THROW FROM THREE-STEP RHYTHM AND RECOVERY**

- **Set up**: Same as above.
- **Activity**: Students take turns throwing the stick as follows:
  - Stand with the right foot forward, javelin withdrawn.
  - Take a step forward with the left foot.
  - Immediately, push hard off the left foot in a forward 'galloping' motion with the right leg swinging forward in a longer, higher stride.
  - Land in the same body position as in the standing side throw.
  - Throw and recovery step.

  Students should try this move with a cone or ball in hand first, then graduate to the stick when the rhythm is smooth.

**Materials**

- blunt stick with a 10 cm wide, thickly taped, zone at its centre; chalk, cones, hoops for targets, a well-dug sand pit


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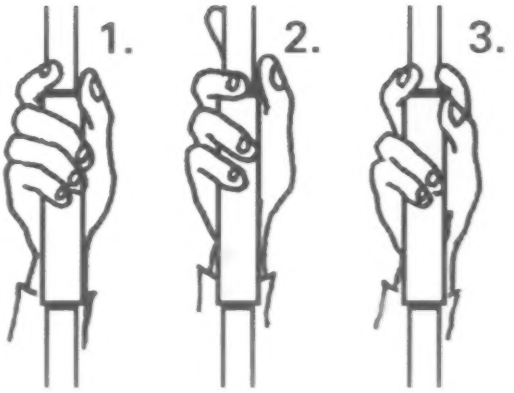
# JAVELIN - LEVEL 4

## Learning Activities

**INTRODUCE 'REAL' JAVELIN, SAFETY MEASURES AND GRIP**

- Assemble the students. Show them a real javelin and three possible grips: thumb and index finger, thumb and second finger, 'split finger.' [The students will decide on which grip they prefer during the Specific Preparation exercises below.]
- Review safety measures:
  - Only throw the javelin on the teacher's signal; e.g., "All throw".
  - All the students are to stand well back or in designated "containment" areas while waiting for a turn.
  - Each student looks BEFORE throwing to make sure there is nobody in the landing area or in the probable line of flight or standing immediately behind. **The back end of the javelin can be very dangerous, too.**
  - After throwing, wait until ALL have thrown or until instructed by the teacher to collect the javelin. **Safety note: From this point onward, the students must wait for the teacher to say "ALL THROW" and "ALL RETRIEVE" before doing either move.**
  - Always walk with the javelin tip DOWN while carrying it back to the throwing area or to and from storage. **NEVER 'play' with the javelin outside of teacher-supervised throwing practice.**

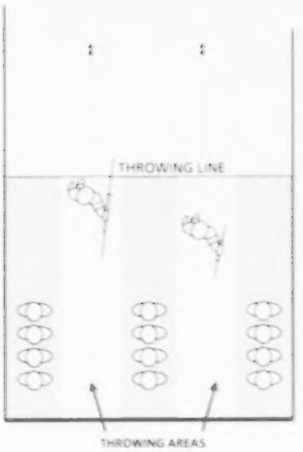



**SPECIFIC PREPARATION**

- Review progressions from Level 3 javelin. Students should try various grips and decide which grip feels most manageable. Throws from three steps and recovery, in particular, should be practiced until smooth.

**FIVE STEPS AND THROW (RIGHT-HANDED THROWS)**

- **Activity**: Create two to three "runways" and "containment" areas as illustrated. The general procedure to be followed is:
  - One student on the runway while all the others wait in containment areas.
  - Student throws on a signal from the teacher.
  - Student retrieves the javelin on signal and walks back to the respective runway, hands the javelin to the next student in line and goes to the back of the line in the containment area.
- **Activity**: Same body position and throwing action as for three-step throw in Level 3
  - With two strides attached to the beginning.
  - Stand side-on to the direction of the throw, javelin withdrawn and right foot ahead of left foot. Then, take five steps (three walking steps, followed immediately by a 'gallop' or 'cross-over') and throw.
    Rhythm should be: 1•••2•••3•••4, 5
  - Same as above, but now running the first three steps of the five-step throw, plus a recovery step. Each student must eventually determine a starting mark on the runway that best accommodates the five step run-up and recovery step. This spot is identified with a chalk mark or cone.



**APPROACH AND WITHDRAWAL**

- **Set up**: Student stands facing straight ahead with the javelin in hand, palm up, and held at ear/eye level. In this stance, the right elbow is bent and facing straight ahead.
- **Activity**: Starting with the right foot in front, the student walks four strides to the five-step check mark established above. As the right foot lands opposite the check mark, the student initiates withdrawal of the javelin. Over the first two strides of the final five steps, the right arm completes its backward extension and the upper body rotates to be side-on to the direction of the throw. Now the body is in the same position as at the outset of the three-step throw as in the last stage of Level 3. The withdrawal should be practiced while walking, then jogging.

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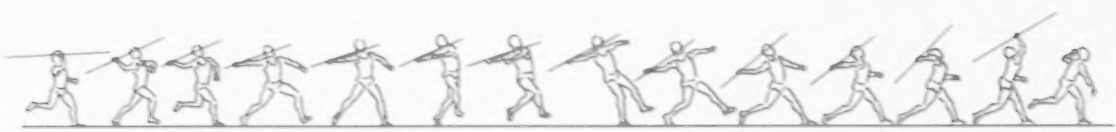
**WHOLE SEQUENCE**

- Identify the start mark for the running approach to the final five steps. This can be done by running back opposite to the direction of the throw four strides from the five-step check mark. A chalk mark is made to identify the spot.
- Students now practice taking four running strides in to the final five steps. This whole sequence (four running strides and five final steps) is rehearsed without the javelin in hand until footwork is smooth and consistent.
- With the javelin in hand the students do the whole sequence on the run, practicing the timing of the withdrawal and controlling the position of the javelin during the final five steps—NO THROW.
- Students now practice the whole sequence on the run, including the throw and recovery. As the students become more accomplished, additional running strides can be attached to the four-stride run-up.

**Materials**

- javelins or sticks, chalk, cones, hoops for targets; a well-dug sand pit



Javelin Throw—Full Sequence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# BACKGROUNDER

- The IAAF World Championships in Athletics are held every two years under the authority of the International Amateur Athletic Federation (IAAF). The 8th IAAF World Championships are scheduled for **August 3–12, 2001**, in Edmonton, Alberta, Canada.

- Based on an anticipated television viewing audience of 4 billion, the IAAF World Championships in Athletics is the third largest sporting event in the world, third in scope only to the Summer Olympic Games and the World Cup of Soccer. Over 2,500 international media are expected to attend the Championships, providing coverage to the world.

- The Championships are expected to attract more than 3,000 athletes, coaches and team officials from more than 200 member federations.

- The IAAF World Championships in Athletics consists of 24 men's and 22 women's athletic events.
  - 100 m, 200 m, 400 m, 800 m, 1500 m, 5000 m, 10000 m and Marathon
  - 100 m Hurdles (women), 110 m Hurdles (men), 400 m Hurdles and 3000 m Steeplechase (men)
  - 4 x 100 m and 4 x 400 m Relays
  - 20 km and 50 km (men) Walks
  - High Jump
  - Long Jump
  - Triple Jump
  - Pole Vault
  - Shot Put
  - Discus
  - Hammer
  - Javelin
  - Heptathlon (women)
  - Decathlon (men)

- Canadians Bruny Surin (100m) and Mark Boswell (High Jump) both brought home Silver Medals from Seville, Spain, host of the 7th IAAF World Championships in Athletics, held in August of 1999.

- Edmonton, Alberta, will be the first North American city to ever host the IAAF World Championships in Athletics. Previous IAAF World Championships host cities include: Seville, Spain (1999), Athens, Greece (1997), Göteborg, Sweden (1995), Stuttgart, Germany (1993), Tokyo, Japan (1991), Rome, Italy (1987), and Helsinki, Finland (1983).

- Edmonton will host the 43rd IAAF Congress on July 31–August 2, 2001, just prior to the IAAF World Championships in Athletics. Approximately 400 representatives from at least 200 National Member Federations gather for Congress, the IAAF's ultimate decision making body. Congress is held every two years in conjunction with the IAAF World Championships in Athletics.

- The total direct, indirect and induced economic activity resulting from expenditures by visitors, athletes, officials, media, event organizers and construction of facilities is estimated at $387 million throughout the province of Alberta. The final net impact will be an estimated $203 million increase in Alberta's GDP, with $157 million of this total remaining in the Edmonton region.

- Spectators will watch the Championships live at Commonwealth Stadium, home to the world's largest 16:9 aspect ratio wide-screen LED Sony JumboTron. Spectators will enjoy high-quality images even from short distances. Accompanying the new JumboTron is the largest and most advanced lamp matrix board in Canada, as well as a new public address and sound system.

- Close to 5,000 volunteers will be needed for the Championships. There will be a call for volunteer applications in the fall of 2000.

- **Tickets for Edmonton 2001 8th IAAF World Championships in Athletics** are available at Ticketmaster 1–877–240–2001 or 780–451–8000, at The World's Market, 10044 – 108 Street, Edmonton, Alberta or at <http://www.2001.edmonton.com>.


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# ATHLETICS

## About

Stripped to its bare essentials, athletics (or track and field) is about running faster, jumping higher and throwing further than your competitors.

## The Competition

Athletics can be divided into four areas: track, field, road and combined events.

The track events include sprints (100 m, 200 m, 400 m), middle-distance running (800 m and 1500 m) and long-distance running (5000 m and 10 000 m), hurdling (100 m and 400 m for women, 110 m and 400 m for men), relays (4 x 100 m and 4 x 400 m) and the men's 3000 m steeplechase.

Field events, for both men and women, include the long jump, triple jump, high jump, pole vault, shot-put, discus, javelin and hammer throw.

Road events consist of the men's and women's marathons, 20 km race walk and men's 50 km race walk.

In the combined events—the heptathlon for women and the decathlon for men—athletes compete in a series of track and field events over two days. Points are based upon their finishes in each event, and the person with the most points wins.

# ATHLETICS

## About

### The Rules of Combined Events

*Yesterday, the pentathlon. Today, the heptathlon. Tomorrow, the decathlon.*

The women's combined athletics event, the heptathlon, is widely believed to be no more than a holding pattern. It replaced the original women's combined event, the pentathlon, in 1984 as part of a trend to move women's events closer to the equivalent men's competition. With that in mind, it is widely expected to grow into a similar 10-event decathlon in the future.

For now, though, the two-day heptathlon consists of, in order: the 100-metre hurdles, high jump and shot-put (all on day one); the 200 m dash, long jump, javelin and 800 m run (all on day two). The men's decathlon includes, in order over two days: the 100 m dash, long jump, shot-put, high jump and 400 m run (all on day one); and the 110 m hurdles, discus, pole vault, javelin and 1500 m run (all on day two).

### The Competition

#### Scoring

Decathletes and heptathletes score points based on their performances in each event. The athlete with the most total points at the end of the last event wins, with an emphasis on a strong finish in every event rather than a win in any one.

Indeed, the complex scoring system has been set up to assure an athlete dominating one event cannot score as well as a strong performer in several areas. The scoring for each event is determined by what is deemed feasible in that event, reflecting world records, and an established table shows what a time or figure will be worth in points.

#### Events

In running events except the 1500 m and 800 m, the athletes are placed in heats based on their personal bests in those events, or as otherwise determined by the technical delegate. For drama, the 1500 m and 800 m runs—the final events in the decathlon and heptathlon, respectively—are arranged so one heat includes the leading competitors after the first nine (men) and six (women) events.

For the field events, athletes are divided into two pools, based upon their personal bests in those events.


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**Rules**

The rules for each event in the decathlon and heptathlon essentially match the rules for the individual events, with a few variations.

Athletes in the individual track races are disqualified if they false start twice, but decathletes and heptathletes are disqualified after three false starts. The maximum allowable wind strength for recognition of new, world or Olympic records is four metres a second instead of two.

For more details on the rules for each individual event, see Running rules, Jumping rules and Throwing rules.


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# ATHLETICS

## The Rules of Running

### Track Events

The 12 medal sports for men and 11 for women in track are virtually identical. Men race over 100, 200, 400, 800, 1500, 5000 and 10,000 metres, along with the 110 m and 400 m hurdles, the 3000 m steeplechase and the 4 x 100 m and 4 x 400 m relays. Women do not compete in a steeplechase, and they run the 100 m hurdles instead of 110 m.

#### Rounds and Heats

The events are organized in two, three or four rounds, depending upon the number of entrants. Those runners placing first or second in each heat qualify for the next round, along with the third-place finishers in most events.

The draw for the preliminary rounds in each event is decided through the zigzag principle, which distributes the leading contenders evenly across the different heats. Ranking is based on a runner's best performance of the season. In subsequent rounds, the draw is based on the runner's finish and time in each previous round. When possible, athletes from the same nation run in different heats.

#### Lanes

Runners must stay within their lanes for all sprints, the 110 m hurdles and the 4 x 100 m relay. The 800 m and the 4 x 400 m relay begin in lanes, and runners must stay within the lanes until they pass the breakline, which signifies they can move across.

In the first round of heats, athletes are allocated lanes through a random computer selection. In subsequent rounds, lane selection is based on how a runner is seeded after performing in the previous round. The aim is having the better runners in the middle lanes, so a lot is drawn to allocate lanes 3, 4, 5 and 6 to the four highest-ranked athletes or teams and lanes 1, 2, 7 and 8 to the four lowest-ranked.

#### Starting

Races begin at the sound of the starter's gun. The starter assures competitors are in correct starting position, then calls "On your mark" and "Set", then fires the gun in the air. A false start is declared if an athlete jumps the gun. If the same athlete does it again, he or she is disqualified—except in the heptathlon and decathlon, the combined track-and-field events in which athletes are disqualified after the third time.


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In all sprints, the shorter races up to and including the 400 m, athletes must use a crouch start in the starting blocks. That includes the first leg of the relays. For events 800 m and above, the starter calls "On your mark" and then fires the gun, as athletes use a standing start.

**Winning**

The winner of a race is the first athlete whose torso reaches the plane of the finish line. If two athletes vying for a spot in the next round tie to 1/1000th of a second (highly unlikely) both advance to the next round. If that is impractical, lots will be drawn to decide who advances. If it occurs in a final, officials can arrange for the two athletes to race again, or, if that is impractical, they share the gold medal.

**Relay Races**

In all relays, runners must exchange the baton within the 20 m take-over zone. After handing over the baton, runners must stay within their lanes until the course is clear or their team may be disqualified.

If a runner drops the baton during a relay, only the one who dropped it may recover it. The runner may leave his lane to get it, provided he does not obstruct other runners and recovering it would not lessen the distance to be covered.

**Wind Assistance**

A sprint or hurdle will not be recognized as a world record if the wind strength behind the jumper exceeds two metres a second (7.2 kilometres per hour).

## The Track

The track is an oval running 400 m in its inside lane. A curb, five centimetres high borders the inside of the track, and each lane runs 1.22 to 1.25 metres wide. Races run counterclockwise, and the lanes are numbered 1 to 8 from the inside out.

## Road Events

One change is planned. The women's 20-kilometre race walk returns after being cut to 10 km at the 1996 Atlanta Games. It joins the men's 20 km and 50 km race walks and the men's and women's marathons on the schedule. The marathon and the walking races differ from the track events in that, participants may leave the course—as long as a judge supervises them. If not, they are disqualified.

**Starting**

Each road event involves a single race with no draw. The athletes take their places randomly when the starter calls them to the starting line, and the race begins at the sound of the starter's pistol. Anyone who jumps the gun twice is disqualified.


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### Winning

Again, the winner of the race is the first person whose torso reaches the plane of the finish line.

### Refreshment Stations

Anyone participating in a road race may get outside help, although under strict guidelines. Water and other refreshments are provided at the start and finish of the race, and refreshment stations are positioned at 5 km intervals along the route. Drinks are placed where the competitors easily can pick them up as they pass.

Athletes also may provide their own drinks and nominate the stations where they want them placed.

Drinking and sponging stations are placed halfway between each refreshment station. There, runners and walkers can pick up drinks of water and sponges to wring over their heads and cool off as they pass. They may refresh themselves at as many stations as they like, but they cannot pick up drinks anywhere else along the course.

### Walking Rules

The walking races have two core rules. The distinctive gait that race walkers use, often very peculiar to the eye, is forced upon them by those rules. First, a walker must have at least one foot on the ground at all times. Second, from the moment the advancing foot touches the ground until the leg has reached a vertical position, that leg must be straight, not bent at the knee.

Up to nine judges are distributed around the course, watching for any competitors breaking either rule. No electronic aids are used, because the rules stipulate a breach of the regulations must be visible to the naked eye.

When a judge sees a walker in danger of breaking one of the rules, he or she may caution the walker once. That usually is done by displaying a white sign with the offence identified by a symbol on each side. The judge then notifies the chief judge. Once three judges have warned a walker, he or she is disqualified.

## Other Rules

- The race referee may disqualify any runner who jostles or obstructs another competitor.
- Athletes who voluntarily leave the track during a track race may not continue in the race.
- Competitors may receive no help or advice during a track event, except in the events of 5000 m or more where water and sponges can be provided if weather conditions warrant it.


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# ATHLETICS

## The Rules of Jumping

It seems so straightforward, athletes seeing who can jump farthest or highest, who can launch farther into the air with a pole or cover more territory in a hop, step and jump. Yet, like all competitions, smaller strategies come into play.

Take on a height that seems easy or risk missing the next height and getting no credit for either? That's just one area where a jumper or vaulter must weigh up the rules, advantages and disadvantages, and make a choice.

Women's pole vault debuted in 1999 at the 7th IAAF World Championships in Athletics, in Seville Spain. For the first time, men and women competed in identical programs, the pole vault, high jump, long jump and triple jump. The high jump and pole vault are straight elimination events, while the long jump and triple jump consist of six rounds each.

## High Jump and Pole Vault

### The Events

High-jumpers, required to take off on one foot, try to jump over a bar without knocking it from its supports. The pole vault is similar, except vaulters use poles to propel themselves into the air and soar much higher. The chief judge sets the starting height in each event. The high-jump bar then is raised at least two centimetres after each round, the pole-vault bar five centimetres, until one person is left.

High-jumpers and vaulters choose when to jump or pass. They stay in the competition until they fail to clear the bar three straight times. Their highest successful jump then becomes their results.

### Ties

Strategy is involved in passing on some jumps. If two people tie with their highest jumps, the two common tie-breakers are, first, who needed the fewest tries to clear the height, or, next, which person missed fewer jumps overall. If the tie remains, the athletes are awarded the same placing unless a gold medal is at stake.

### Jump-offs

In that case, a jump-off is held. Each competitor that has tied is allowed one jump at the lowest height where the athletes involved in the tie were eliminated. If all tied athletes clear the bar, the height is raised, while if all tied athletes fail to clear the bar, the height is lowered, until one athlete becomes a clear victor by being the only one to clear the current height.

### Qualification Round

Two rounds of competition are conducted in high jump and pole vault. The qualification round is generally divided into two groups, with the aim to reduce the final to 12 competitors only. Prior to the competition an automatic qualifying performance is set and any athlete that obtains this standard in the qualifying round will automatically proceed to the final. If less than 12 athletes achieve this standard, the top performers from the qualifying round are added to make up the required numbers for the finals.

### Measurements

In the high jump and pole vault, all measurements involve whole centimetres, from the ground to the lowest part of the top of the bar.

## Long Jump and Triple Jump

### The Events

The long jump and triple jump consist of athletes running along a runway and jumping as far as possible into the landing area. However, in the triple jump, when the jumpers reach the take-off board, they essentially hop, step and jump, the former name of the event. That means they first must land on the same foot used for the take-off, then take a bounding stride to the other foot before finally jumping into the landing area.

In both events, only a jumper's best performance counts. After three rounds, the top eight advance to the final three rounds. They then compete in reverse order of the rankings from the first three rounds.

### Ties

Any tie is broken by comparing the second-best performances of those involved. If that does not resolve the issue, the third best performances are compared, and so on. If the tie still remains, it stands—again, unless a gold medal is at stake. Then, the athletes continue competing until the tie is broken.

### Measurements

The distance is measured from the far edge of the take-off board to the jumper's closest mark in the sand. It is rounded to the nearest centimetre below the distance measured if a fraction is involved.

### Fouls

A foul is ruled if a jumper oversteps the take-off line at the end of the runway or touches the ground outside the landing area behind the mark. That usually occurs when a jumper extends an arm for support while landing off-balance.

### Wind Assistance

A long jump or triple jump will not be recognized as a world record if the wind strength behind the jumper exceeds two metres a second (7.2 kilometres per hour).


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## Other Rules

- If a competitor is hampered while jumping, the referee can rule an obstruction and allow a second attempt.
- Competitors may leave the event area during competition, but only with permission from, and accompanied by, a judge.
- Athletes cannot receive assistance while an event is in progress, except for a medical examination appointed by officials, or verbal or other communication from an individual who is not in the competition area.
- Judges can penalize an athlete for exceeding the specified time limit for jumping and disallow an attempt. However, if an athlete starts the attempt before time lapses, it counts.

## Competition Areas

### High Jump

In the high jump, jumpers approach the bar from a level take-off area at least 20 metres long. The round bar is about four metres long, weighing no more than four kilograms and supported by two uprights. The jumpers land on a large, soft foam pad.

### Pole Vault

In the pole vault, vaulters approach on a level runway at least 40 m long and take off by placing their poles in a metre-long box sunk into the runway. The walls of the box slope inward and taper toward the far end, guiding the pole toward the stop board at the end, where the box is 20 cm deep. The poles are smooth, although perhaps taped to improve grip, and may be as long or thick as desired. The crossbar is similar to the high jump, but lighter for safety, and the vaulters also land on a soft foam pad.

### Long Jump and Triple Jump

The runway for the long jump and triple jump is at least 40 m long. The foul line is the far side of the 20 cm-wide takeoff board, and the jumpers land in a rectangular pit of soft, damp sand. The sand is one to three metres from the board in the long jump and 13 m for men, 11 m for women in the triple jump to allow the hop and step. A line of plasticine at the end of the board helps to detect fouls.


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# ATHLETICS

## The Rules of Throwing

The women's hammer throw debuted at the 1999 7th IAAF World Championships in Athletics in Seville, Spain. Men and women now are represented equally in throwing events. However, like the other throwing events—the shot-put, discus and javelin—the difference is in the details.

In each case, not only the weight, but also the size of the object being tossed differs between men and women's competition. That accommodates a natural grip for throwing.

## The Events

The throwing events consist of six rounds of competition between athletes trying to heave heavy projectiles as far as possible. While the javelin was thrown for accuracy in the ancient Games of Olympia, distance is all that matters today. The javelin throw is the only one of the four categories involving a running start.

In each event, only an athlete's best performance counts. After three rounds, the top eight in each event advance to the final three rounds, where they compete in reverse order of the rankings at that point.

### Ties

In case of ties, the first tie-breaker is the athletes' second-best performances. If that doesn't break the tie, their third best performances are compared, and so on. If the tie still remains, it stands—unless a gold medal is at stake. Then, the athletes continue competing until the tie is broken. In all throwing events, if a fraction is involved, distances are rounded to the nearest centimetre below the distance measured.

### Time Limits

The judges can penalize an athlete for an "unreasonable" delay in throwing and disallow an attempt. However, if someone starts an attempt before the time lapses, it counts. The time limit generally is one minute.

## Other Rules

- A competitor may abort a throw halfway through and begin again, providing he or she hasn't already thrown or put a foot outside the throwing circle or runway.
- If a person is hampered while throwing, the referee can rule an obstruction and allow a second attempt. Competitors may leave the event area during competition, but only with permission from, and accompanied by, a judge.
- Athletes cannot receive assistance while an event is in progress, except for a medical examination approved by officials, or verbal or other communication from an individual who is not in the competition area.


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- Javelin throwers may not turn around completely on a throw so their backs face the direction they are throwing.
- After completing a throw, competitors in hammer, discus and shot put must exit the circle from the back of the circle.

## Equipment

### Javelin

The javelin has three parts, the shaft, head and grip. The shaft is a smooth metal rod tapered at both ends, with the head, a sharply pointed metal cover, fixed to the front end. The grip is positioned so it covers the javelin's centre of gravity. The men's javelin is 2.6 to 2.7 metres long and weighs at least 800 grams, while the women's javelin is 2.2 to 2.3 metres and weighs at least 600 g.

### Hammer

The hammer has three parts—the head, wire and grip. The head is a round ball with a diameter of 110 to 130 millimetres for men and 95 to 110 for women. The wire is three millimetres in diameter, while two arms joined by a curved handle form the grip. The entire hammer must weigh at least 7.26 kg and measure 117.5 to 121.5 centimetres for men. For women, it must weigh at least four kilograms and be 116 to 119.5 cm.

### Shot-put

The shot, a heavy, round, metal ball with a smooth finish, has the same weight requirements. In men's competition, the diameter must fall between 110 and 130 mm, compared with 95 to 110 for women.

### Discus

The discus, a wooden plate with a metal rim around the circumference, has two identical smooth sides that are flat in the centre. The men's discus weighs 2.005 to 2.025 kg and runs 21.8 to 22.1 cm in diameter. The women's discus weighs 1.005 to 1.025 kg and measures 18 to 18.2 cm in diameter.

## The Throwing Area

### Discus, shot-put, hammer

Athletes throw from a standing start within a circle for the shot-put, hammer throw and discus. An iron band 6 mm thick and painted white surrounds the circle on top. When throwing, competitors must not touch the top of the band or the ground outside the circle.

The circles for the shot-put and hammer throw are 2.135 m in diameter, while the discus circle is slightly bigger at 2.5 m. The floors are made of cement or a similar firm, non-slip material and lie slightly lower than the ground.

At the front of the shot put ring is a wooden stop board 1.21 to 1.23 m long to assist athletes from sliding outside the circle. Athletes may touch the inside, but not top of the stop board.

**Javelin**

The javelin throw is completely different. Competitors run along a runway 30 to 36.5 m long before throwing. The two sidelines of the runway join a metal or wood arc at the end, and the thrower must release the javelin from behind it.

**Landing Area**

In all four events, the landing area is flat and made of cinders, grass or another material which also will expose imprints. Similarly, white lines 5 cms wide bound each landing sector. In the shot-put, hammer throw and discus, if the lines were drawn all the way back to the centre of the circle, they would create a wedge of 40 degrees. In the javelin, the lines would form a wedge of 29 degrees.


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# Athletics

## Glossary

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| **Anchor** | The last runner in a relay race. |
| **Bar** | The crosspiece of wood, metal or plastic which high jumpers and pole-vaulters must clear. |
| **Baton** | A smooth, hollow metal or wooden tube which is passed from one relay runner to the next. |
| **Bounding** | Repeated and continuous leaping across a surface. |
| **Box** | The contoured dugout which pole-vaulters place their pole into to jump over the bar. |
| **Breakline** | An arc across the track, denoting the point where runners may leave their original lane and use any part of the track, which normally is the inside lane. |
| **Changeover** | The passing of the baton from one runner to the next. |
| **Circle** | The round area within which shot-putters, discus and hammer throwers must stay when throwing their respective projectiles. |
| **Countback** | A process used to determine the winner if two high jumpers or pole vaulters reach equal heights, based upon reviewing which athlete failed least in his or her jumps at that height or in the whole competition. |
| **Crouch start** | The crouched position all sprinters must assume before starting a race. |
| **Decathlete** | A contestant in a decathlon. |
| **Decathlon** | An athletic contest comprising of 10 different track-and-field events and won by the contestant having the highest total score. |
| **Discus** | A wooden plate rimmed by metal and heaved by athletes aiming for the greatest distance. |
| **Exchange Zone** | See take-over zone. |
| **False start** | An illegal beginning to a race in which a runner begins before the starter's pistol is fired. |
| **Field event** | An athletic event that involves jumping or throwing. |
| **Foul** | A violation where, most commonly, an athlete jumping or throwing for distance steps across the line or circle defining the limit of the athlete's approach to an attempt. |
| **Hammer** | A heavy metal ball attached to a wire cable, which is attached to a handle, used for the hammer throw. |


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| **Hammer throw** | The field event in which athletes attempt to throw the hammer as far as possible. |
| **Heat** | An early race of an event, with the top finishers advancing to the finals or semifinals of the competition. |
| **Heptathlete** | A contestant in a heptathlon. |
| **Heptathlon** | An athletic contest comprising of seven different track-and-field events and won by the contestant having the greatest total score. |
| **High jump** | 1. A vertical jump with which athletes attempt to clear a bar.<br>2. The field event in which athletes attempt to jump over a bar. |
| **Hurdles** | 1. The obstacles which contestants must pass over, in a hurdles race.<br>2. A running race in which athletes must pass over set obstacles on the track. |
| **Javelin** | 1. A metal or wooden shaft with a metal point, similar to a spear, thrown for distance.<br>2. The field event in which athletes attempt to throw the javelin as far as possible. |
| **Jump-off** | A sudden-death contest used to determine the winner in high jump and pole vault if the athletes finish at the same height and a countback cannot determine the winner. |
| **Jump the gun** | To commit a false start by beginning before the starter's pistol is fired. |
| **Kick** | A burst of speed saved for the final stretch of a long race. |
| **Lanes** | The eight alleys on the track which runners must run in during some races. |
| **Lap** | 1. One time around the track.<br>2. To surpass another runner in a race by one loop of the course. |
| **Leg** | One of a number of parts of a race, each of which must be completed to determine the winner. |
| **Lifting** | A violation in the walk for lifting a foot before the leg has bent for a moment. |
| **Long distance** | The label given to the races at least 5,000 metres in length. |
| **Long jump** | Former name for the broad jump.<br>1. A jump with which athletes aim to cover the greatest distance from a given mark.<br>2. The field event in which athletes try to jump as far as possible. |
| **Marathon** | A 42 kilometre road race re-enacting the distance run by a Greek messenger in 490 BC. |
| **Middle distance** | The label given to the races covering 800 and 1500 metres. |


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| **On your mark** | The starter's call for runners in a race to move to the starting line and assume position to start the race. |
| **Pole vault** | 1. A leap over a horizontal bar with the help of a long pole.<br>2. The event in which athletes try to clear a bar with the help of a long pole. |
| **Relay** | A race in which athletes race in teams of four, taking turns to run. |
| **Road race** | A race, run on established roads or footpaths, not on grass or other soft ground. |
| **Runway** | A running strip for jumpers and throwers where they build up speed as they approach their attempts in their events. |
| **Scratchline** | A line marking the centre of the take-over zone. |
| **Set** | The starter's second call to runners in a sprint, alerting them to rise quickly into their final starting positions before the starter's gun is fired. |
| **Shot** | A heavy metal ball used in the shot-put. |
| **Shot-put** | The field event in which athletes try to put, or throw, the shot as far as possible. |
| **Sprint** | A short race at full speed, generally meaning a race of 400 metres or less. |
| **Starter's gun** | The pistol used by the starter to fire blanks in the air, signaling the start of a race. |
| **Starting blocks** | A pair of angled supports for the feet, temporarily attached to the track, to increase the power of a sprinter from a crouch start. |
| **Steeplechase** | A race run by people over a course which features obstacles such as water-filled ditches and barriers. |
| **Stop board** | 1. The far point of a tapered box sunk into the runway for the pole vault, where the vaulter's pole is intended to lock into position as the athlete launches into the air for the vault.<br>2. The raised board that defines how far a thrower can range before releasing his attempt. |
| **Sudden death** | An extra round or rounds of competition held to resolve a contest that has resulted in a tie, i.e., a jump-off in the high jump or pole vault. |
| **Take-off board** | A rectangular board, usually made of wood, placed in the runway in the long jump and triple jump which marks the jumping area. |
| **Take-off line** | The plasticine line at the end of the take-off board in long jump and triple jump before which athletes must have jumped. |
| **Take-over zone** | A defined area in a relay race where the baton must be exchanged between runners on a team. |
| **Track** | 1. The oval course laid out for racing.<br>2. Athletic events run on that course. |

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| **Triple jump** | The jumping event which features the hop-step-jump sequence. |
| **Uprights** | The vertical poles, which hold the bar in high, jump and pole vault in place. |
| **Walk** | A race where the walker must have at least one foot on the ground at all times and the advancing leg must be kept straight. |
| **Water jump** | A man-made obstacle in the steeplechase usually consisting of a miniature swimming pool containing water up to 70 centimetres deep. |
| **Zigzag principle** | A style of draw which distributes the leading contenders evenly across the different heats. |


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